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ABSTRACT

This volume contains abstracts of the more than 300 discussion papers, symposia, displays, and training sessions presented at the Mid-South Educational Research Association (MSERA) 1999 annual meeting. Papers deal with elementary, secondary, and higher education and cover a broad spectrum of educational issues. Although many papers focus on the mid-South, others deal with other parts of the United States. (SLD)

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Mid-South Educational Research Association

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Twenty - Eighth Annual Meeting

NOVEMBER 17-19, 1999

POINT CLEAR, ALABAMA

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PROCEEDINGS OF THE
TWENTY-EIGHTH ANNUAL MEETING
OF THE
MID-SOUTH EDUCATIONAL RESEARCH ASSOCIATION

CONTAINING THE ABSTRACTS OF DISCUSSION SESSIONS,
DISPLAY SESSIONS, SYMPOSIA,
AND TRAINING SESSIONS

JOHN R. PETRY, EDITOR
LORRAINE ALLEN, ASSISTANT EDITOR
MARY BRIGNOLE, ASSISTANT EDITOR

NOVEMBER 17-19, 1999
POINT CLEAR, ALABAMA

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1999

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MSERA SESSIONS ARE OPEN ONLY TO MSERA MEMBERS WHO ARE REGISTERED AT THE ANNUAL MEETING. BADGES SHOULD BE WORN TO ALL SESSIONS TO ENSURE ADMISSION.

MSERA

The Mid-South Educational Research Association was organized on March 20, 1972, on the campus of The University of Mississippi. It is a non-profit organization whose purpose is to encourage quality educational research in the mid-south and to promote in the schools the application of the results of quality educational research. Any person who supports the purpose of the Association is eligible to join the Association.

MSERA Archives

Papers presented at the Annual Meeting of the Mid-South Educational Research Association are filed in the MSERA Archives at the Mitchell Memorial Library at Mississippi State University. Copies of papers may be obtained subsequently for a nominal fee by calling the Special Collections Room at the library at (601) 325-7680.

Proceedings, ISSN 1055-3959

MSERA

28th Annual Meeting

ACKNOWLEDGEMENTS

Over the past 25 years I have become increasingly aware of the special characteristics of our membership in MSERA. When I served as Program Chair during Glennelle's year as President, as I assisted Dot Reed as Secretary/Treasurer when she was President, and as I assisted John Enger when he was President and I was Vice President, this truism became even more obvious. New and old members alike continue to come forward to assume roles to take MSERA to higher levels.

Although all of our members on whom I have called for assistance have willingly and effectively served, there are a few who have made truly outstanding contributions to our success.

Cliff Hofwolt, our incoming President, has been Mr. MSERA over the past four or five years. In his different leadership positions his commitment to quality and to the support of his fellow MSERA members have enabled him to perform his assigned and unassigned tasks at the highest level, but equally important he has assisted his fellow MSERA colleagues to perform their assigned duties at the highest level. He has certainly enabled me to serve you more effectively over the past several years.

Barbara Lewis, our Local Arrangements Chair, has coordinated our involvement with the Grand Hotel. This responsibility was extremely time intensive. She performed it with effectiveness and class.

Our entire University of South Alabama College of Education membership played a significant role in our successful year in MSERA. Jean Newman, our Local Arrangements Co-Chair, and Gahan Bailey, one of our Board members, made a number of important things happen this year. They both actively and effectively recruited new members and gained support for MSERA, especially in the South Alabama area.

Jerry Mathews, Membership Committee Chair, made herculean efforts to recruit new members. Working with this relatively new colleague at Auburn University and in MSERA has been a highlight of my tenure in MSERA and at Auburn University.

Judy Boser's volunteering to serve as our Program Chair was an act that positively affected us all. The program for our annual meeting is the heart of our organization. Judy and the Program Committee are to be commended for the superb program they have planned for us.

Our Co-editors of *Research in the Schools*, Jim McLean and Alan Kaufman, are to be commended for their fine work they continue to do with our journal.

David Morse's work to establish and maintain our MSERA Web site, which includes editing, adapting, and posting many of our documents on the Web, is proving to be invaluable as we increase our use of technology.

Nola Christenberry and Lynn Howerton have continued to improve the quality of our *MSERA Researcher,* which is our primary means of communication within the organization.

And, of course, John Petry's continuing service as editor of the *Proceedings*, particularly as this document has become Web based, is appreciated.

Dean Richard Kunkel of Auburn University and Dean George Uhlig of the University of South Alabama have made commitments to those of us who are MSERA members at these two institutions, to MSERA, and to educational research in the mid-south region by their generous support of our two receptions. Their contributions are most impressive and appreciated.

The list could easily go on and on with the contributions that other committee and Board members have made. As Dot Reed wrote a couple of years ago, the continued dedication to this organization by its members will keep "the spirit of MSERA," as Judy Boser called it, alive and the organization healthy.

On behalf of the entire leadership group, we thank you the members for the opportunity to have served. Glennelle and I both certainly consider it a high honor to have served MSERA as President. We thank you for your support and friendship.

Gerald Halpin, Auburn University
MSERA President, 1999

MSERA

28th Annual Meeting

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ABSTRACTS OF DISCUSSION SESSIONS, DISPLAY SESSIONS, SYMPOSIA, AND TRAINING SESSIONS

(BY DAY AND SESSION)

7:30 a.m. - 4:00 p.m. **REGISTRATION**........**Grand Ballroom Foyer**

7:45 a.m. - 8:45 a.m. **NEW MEMBER AND GRADUATE STUDENT BREAKFAST**........**Skylounge**

9:00 a.m.-9:50 a.m.
Session W#001 **AT-RISK STUDENTS (Discussion Session)**........**Salon A**

PRESIDER: John Enger, Arkansas State University

A PRINCIPAL'S REFORM OF A SCHOOL ON ACADEMIC ALERT

Carol A. Mullen, Auburn University, and R. Lynne Patrick,
Paterson Elementary School (AL)

A researcher and principal studied the dramatic change in student achievement within a school on academic alert. This K-6 inner-city school serves two federal housing projects that happen to be home to rival gangs. Improved test scores caught the attention of administrators and the media. The school has been applauded for overcoming its poor image as the lowest achieving elementary school in Alabama. Although recognized as the most improved school in the Montgomery Public School system, it is still on academic alert. To avoid state takeover, the school's SAT-9 scores need to increase. Despite this barrier to success, the school has become a positive marker of urban school renewal.

This study was established to determine how a school on academic alert has been strengthened. Research questions were: (1) What principles are at work in the changes the instructional leader has instituted at her school? (2) What actions did the principal take to improve the school climate? and (3) Is there lasting substance to this principal's work, or is this simply a story of dramatic gestures that have captured the imagination of the media?

The researcher shadowed the principal by visiting the school and engaging her in conversation and writing. Other data included an analysis of audiotaped and transcribed sessions, and school documents. The study identified seven strategies that the principal employed for improving her school's climate: applied a philosophy of discipline and management, resourced support systems, precipitated staff changes, created rituals of visibility and relationship, applied Maslow's hierarchy of needs model, designed new educational and remedial programs, and developed a case for year-round schooling.

The findings suggested that this principal's school could become a model to show that poor inner-city children can learn with all of the appropriate programs in place and with a team of highly effective practitioners.

THE EFFECTS OF SCHOOL ENGAGEMENT/DISENGAGEMENT ON HIGH SCHOOL OUTCOMES: AN ORDINAL REGRESSION ANALYSIS OF 1988-94 NELS DATA

Edward B. Reeves, Morehead State University

Finn (1993), McNeal (1995), and others have argued that student engagement/disengagement with school-related activities affects educational outcomes. The present study tested this argument using a relatively new statistical technique, ordinal regression (Magidson, 1996). The data were taken from the 1988-94 National Education Longitudinal Study Database. High school outcomes, the dependent variable, was rendered in categories ranked from most to least preferred as follows: (1) received high school diploma, (2) received GED, (3) pursuing GED/high school diploma, and (4) not pursuing any.

An ordinal regression model was fitted with the following predictors: number of extracurricular activities, time spent, and number of friends who have dropped. Other predictor variables--such as gender, race, family structure and SES, public versus private school, student ever held back a grade, grade point average, and normed test performance--were also included in the model.

The analysis found that the outcome categories were ranked ordered as hypothesized. Furthermore, the three less preferred outcomes were distant from the most preferred outcome, high school graduation. This meant that the model was especially effective at differentiating high school graduation from the less preferred outcomes. Number of friends who have dropped out of high school was the leading engagement/disengagement predictor, followed by time spent in extracurricular activities each week. Number of extracurricular activities in which the student participates was a weak but still significant predictor. A surprising finding was that school engagement/disengagement variables were more important predictors of high school outcomes than GPA and normed test performance or family SES variables.

The results supported McNeal's claim that extracurricular activities lead to preferred educational outcomes. Encouragement of greater involvement by at-risk students results in an increased likelihood of graduation rather than another, less preferred outcome. Directing at risk students away from relationships with dropouts also yields a preferred outcome.

THE EFFECT OF CURRICULUM MODIFICATIONS FOR AT-RISK STUDENTS ENROLLED IN ENGLISH III

Dianne M. Sawyer, Tennessee State University

The purpose of this study was to investigate the effect of curriculum modifications for at-risk students in English III (eleventh grade). Because there seems to be a growing number of at-risk students and because high schools in Tennessee have been mandated by the state to reduce the drop-out rate to 10% by the year 2000, it is crucial to continue addressing the problem of students who are at risk.

A review of literature revealed that programs including curriculum modifications have been implemented by a variety of school systems in an attempt to reduce the drop-out problem and/or to assist students who are at risk of failing. The review of literature focused on the need for curriculum modification for at-risk students, direct results of curriculum modifications for at-risk students, and case studies that concern at-risk students.

Historical data were collected through high school transcripts of both the control group and the experimental group. Data recorded included gender, ethnicity, social economic status, attendance, age, IQ, first semester grade, second semester grade, and group classification.

A multiple regression using a .05 level of significance was run to determine the correlation between the second semester scores and the first semester scores, in addition to gender, ethnicity, socioeconomic status, attendance, age, IQ, and group classification.

The results of this study revealed that there was a significant difference in scores of at-risk students who received curriculum modifications and at-risk students who did not receive curriculum modifications. Results led to several recommendations, which included early identification of at-risk students, modifications in curriculum, and further study in this area.

9:00 a.m.-9:50 a.m. **TEACHER EDUCATION**
Session W#002 **(Discussion Session)**.. **Salon B**

PRESIDER: Jeffrey Gorrell, Auburn University

TENNESSEE TEACHER EDUCATION FOLLOW-UP SURVEY: PATTERNS OVER SEVEN YEARS

Carol Plata Etheridge and L. Weiping Wang,
The University of Memphis

First-year teachers' perceptions of their preparation in Tennessee institutions were surveyed by their graduating institutions in the spring of the first year after graduation over seven years. The goal was to determine (1) satisfaction with various dimensions of preparation, (2) changes in perceptions, and (3) perceptual changes in relation to state policy changes. Data were collected from 5,563 first-year teachers graduating from 15 Tennessee institutions using the Tennessee Teacher Follow-up Questionnaire (TTEFQ).

The TTEFQ is a close-ended questionnaire containing items pertaining to respondents' demographic characteristics and program components. The instrument is a modified version of the National Database for Teacher Education Program Follow-up instrument long form, and items are consistent with Tennessee and the National Council for Accreditation in Teacher Education (NCATE) standards. The TTEFQ contains four subscales: general education, field experience, professional core, and teaching skills. Respondents are asked to rate various dimensions of their preparation by using a six-point Likert-type rating scale.

Preliminary analyses suggested that Tennessee graduates were generally satisfied with their preparation after one year of teaching except in areas related to technology, special education, and dealing with diversity. However, ratings of these areas showed a consistent pattern of increasing satisfaction over the seven years of the survey. In the areas of physical education and fine arts, levels of satisfaction have consistently declined.

These data trends are consistent with changes in Tennessee policy related to teacher education program content and areas of emphasis. Patterns exhibited by the data suggest that, though trailing state policy changes, areas of emphasis and content in teacher preparation curriculum change as state policy emphasis changes. This is contrary to the often articulated view that teacher education is intractable and gives only minimal response to calls for change.

IT'S ALIVE, IT'S ALIVE . . . BUT IT MAY NOT BE WELL

Melissa E. Whiting and Jack Klotz, University of Southern Mississippi

This discussion focused on the array of educational hoops that institutions, located in a state (Mississippi) where an acknowledged teacher shortage has now become an absolute fact rather than a pessimistic prediction, must immediately jump through in order to produce the "quality" teachers needed to equitably educate its state's students. The discussion presented the current history and situation precipitating the urgent need for new teachers who can immediately fill in the gaps created by teachers who have, in astounding numbers, recently left the Mississippi public school system, and it tapped into the dire predictions and resulting statistics that indicate that this teaching shortage will only continue to grow, despite the implementation of new programs designed to add to the teaching force. From this given situation and vantage point, the rationale was outlined for the newly instituted Masters of Arts in Teaching degree program (MAT) in the state of Mississippi that proposes yet another "solution" to the teacher shortage.

The state teacher-education programs that have already completed the first year of this program were looked at and then the evident and not-so-evident problems that have already obstructed its inaugural year were discussed. In addition, the paper focused on and analyzed some of the institutional barriers that could prevent this program, and programs similar to it, from realistically addressing the pressing pedagogical concerns requisite to not only teacher training but to related issues connected to teachers meeting the goal of students' academic success. Thus, from not only a practice oriented, but a grounded theoretical perspective, were identified some of the overriding problems that prevent programs such as the MAT from findings its much needed success. Also offered were concrete suggestions that could allow for a logically sound and pedagogically concerned program that gives new teachers advantageous tools for classroom survival.

MAINTAINING QUALITY IN TEACHER EDUCATION: WHO IS RESPONSIBLE?

Lynetta Owens and Cynthia H. Harper, Jacksonville State University

Implementation of a system for quality control is imperative for the future of teaching. This system must begin at the university level and spread to the school environment where students actually practice what has been learned at the university. With the growing emphasis placed on clinical field experiences in the professional development of teachers, concern over the effectiveness of the supervision process used with preservice teachers has also increased. Many consider field experiences in teacher education programs, especially student teaching, the most influential aspect of the education of prospective teachers, providing the greatest potential opportunity for learning and thus contributing to the future success of teachers. This causes significant importance to be placed on students enrolled in the internship semester at the local school. In addition to placement in the public schools, serious consideration must be given to factors involved in the assignment of cooperating teachers and university supervisors responsible for evaluation of the student intern.

For effective supervision and evaluation at this institution, this study has selected specific indicators from semester evaluations completed by students, cooperating teachers, and university supervisors that have proven to be crucial in measuring effective student teaching practices. Consequently, students graduating from this College of Education and Professional Studies rank significantly higher in academic preparation for beginning teachers. Further, surrounding states recruit heavily from this university's graduates due to the high level of preparation and vast array of clinical experiences. Findings show that there is a significant relationship between student success in the internship semester and high ratings received by cooperating teachers and university supervisors on the evaluation forms. First year teacher review by the state department of education confirmed the results of these evaluations.

Session participants will be informed of specific indicators used by one university that successfully measure quality in observation and evaluative techniques of student teachers. Session leaders will disseminate data from a five year study that identifies specific observation and evaluative measures used to document quality supervision within field experiences. Data from students, cooperating teachers, and university supervisors generally agree to positive, quality, and effective supervision or negative, ineffective supervision. Evaluation instruments will be shared with session participants.

9:00 a.m.-9:50 a.m. **SCHOOL RESTRUCTURING AND EDUCATIONAL REFORM**
Session W#003 **(Discussion Session)**.. **Salon C**

PRESIDER: Lynn Howerton, Arkansas State University

THE EXODUS OF BUILDING PRINCIPALS FROM RESTRUCTURING SCHOOLS: WHERE DID THEY GO?

Beverly M. Klecker, Eastern Kentucky University

Personnel in Ohio's Venture Capital Schools submitted self-designed restructuring plans to the state legislature for funding. In the first two rounds (1993-94), 307 schools were granted $25,000 per year, renewable for five years. Demographically, the grade level of funded schools was representative of schools in the state; however, the gender of the building principals was not representative. More female principals than expected were leading Venture Capital Schools. Surprisingly, after the first year, 30% of the 307 principals left; at the end of the second year, another 30% left; at the end of three years, the total attrition rate was 70%.

Researchers surveyed the 307 principals in 1995; 168 responded to an "openness to change " instrument. Demographics of these 168 principals were representative of those in the 307 schools.

Questions used were: (1) Was the attrition rate in the group of 168 principals the same as for the population of 307? (2) Were there demographic differences among principals who left (e.g., school level, region of state, gender of principal, years of service of principal)? and (3) Why did the principals leave?

The names of the principals responding to the original study were compared with names of principals currently employed in the Venture Capital School (from Internet). The original data were recoded to identify "leavers" and "stayers." Chi-square tests of goodness-of-fit were used to explore differences by demographics. A stratified random sample (gender and level) of "leavers"was contacted by telephone.

The attrition rate for the 168 principals was no different from that of the 307. There was a difference by school level; more elementary principals stayed. There was no difference by gender. Reasons for leaving were described. Implications were discussed.

THE IMPACT OF ONE SCHOOL DISTRICT'S CHANGE FROM A TRADITIONAL SCHOOL CALENDAR TO AN ALTERNATIVE ACADEMIC CALENDAR

Paige L. Tompkins, Western Kentucky University

The researcher compared school district data from before the inception of an alternative academic calendar to data after its inception to help determine the impact of shifting away from a traditional school calendar on the following four areas: attendance, discipline, student achievement, and student, parent, teacher satisfaction.

The school district used in the study was the Bowling Green Independent School District (Bowling Green, KY), which implemented an alternative academic calendar during the 1998-99 school year. The district has six elementary schools, one middle school, one high school and serves about 3,500 students. The alternative academic calendar provides 175 instructional days, broken down into four quarters of roughly 44 days each; three two-week breaks after the fall, winter, and spring quarters; and an eight and a half-week summer break. Intercession remediation is offered during breaks.

In order to address the areas of attendance, discipline, and student achievement, data were collected from the 1996-97 and the 1997-98 school years, which were subsequently compared to 1998-99 school year data. To assess student, parent, and teacher satisfaction, three separate surveys were created by the district and then administered to each of the three groups respectively.

For the first three research areas (attendance, discipline, and student achievement), descriptive statistics were used to illustrate differences between years prior and years after implementation of the alternative academic calendar. Similar descriptive techniques were used to denote student, parent, and teacher satisfaction with the alternative academic calendar. Conclusions within each research area regarding the impact on the district of changing from a traditional school calendar to an alternative academic calendar were drawn as suggested by the data. Implications for school districts exploring changes to the traditional school year were included.

SUPPORTING REFORM: LESSONS FOR THE URBAN SYSTEMIC INITIATIVE

Scott C. Bauer and Caroline Cody, University of New Orleans

This paper dealt with the evaluation of one city's comprehensive school reform program sponsored under the National Science Foundation's Urban Systemic Initiative. Using total quality and the principles of organizational design as a framework, the evaluation investigated both the district's capacity for change (vision, management processes, human resource development) and accomplishments (changes in classroom behavior, learning outcomes).

A multi-method approach was taken to conduct the evaluation. A document analysis was conducted to summarize project activities and accomplishment. Assessment of district capacity involved interviews with central office staff involved in the initiative, school administrators, and focus groups of teachers. Additionally, staff surveys were used to determine the generalizability of staff perceptions. Assessment of accomplishments included reviewing existing data relating to student performance and achievement, and collecting data through classroom visitations in 29 schools.

Results indicated that district-level support for school-based change was an ongoing issue. Specifically, lack of alignment of purchasing processes with classroom activities, and insufficient school-based funding to support expanded use of hands-on activities, interfered with progress in implementing a standards-based, more learner-centered curriculum. Mechanisms for delivering staff development were also a major issue; pull-out programs and summer staff development was seen by school staff as inefficient and inadequate as compared with more tailored, school- and classroom-based activities.

The specific lessons derived from these data are important to understand to develop a fuller appreciation for the issues associated with scaling up school reform. Further, the evaluation process is important; consistent with the quality framework, all levels of the school system were examined both in terms of their contribution to change and in terms of their connection to other levels. Organizational products and processes were examined in relation to their interconnectedness and their efficacy in contributing to educational improvement.

9:00 a.m.-9:50 a.m. **ATTITUDE AND ACHIEVEMENT**
Session W#004 **(Discussion Session)..Salon D**

PRESIDER: Gene Franks, Georgia Southern University

FIRST LANGUAGE ACHIEVEMENT AS A SIGNIFICANT PREDICTOR FOR SECOND LANGUAGE ACHIEVEMENT

Julia A. Tirres, Tennessee State University

The study examined the permanent records for the graduating class of 1998. The researcher hypothesized that students, first language (L1) achievement does not significantly predict their second language, L2, achievement.

The sample for the study consisted of 231 secondary school seniors. The data were collected from 222 records available in the school archives. The data included eight variables. L2 was the dependent variable, and L1, ACT, SAT, TCAP, attendance, gender, and race were the independent variables. The sample consisted of 112 male and 110 female students. The ethnicity of the group consisted of 207 white and 15 black students.

Some of the records had missing data; therefore, the mean of all the variables was used to include all the subjects that had no data. A matrix was created, and the data were converted into a text file. A stepwise multiple regression was run on SPSS with an alpha of .05.

The adjusted R2 indicated that 39% of the variability can be explained by the L1 in relation to the L2 in step 1. L1 and ACT explain 6% of the variability in relation to the L2 in step 2 of the stepwise multiple regression. In the ANOVA's final model with an alpha of .05 was statistically significant F (2, 219) = 91.654, p .0004. The following suggestions are stated for consideration: (1) that majority students, English speakers, deficient in L1 will be identified in elementary school, (2) that guidance counselors check L1 GPA before scheduling students with low L1 GPAs, (3) that L1 and L2 teachers cooperate to help students with L1 deficiencies, and (4) that a study with a more representative population be made to generalize the findings.

THE USE OF FACTOR SCORES OF INCLUSION BELIEFS/ATTITUDES IN THE PREDICTION OF KNOWLEDGE AND SKILLS AMONG SPECIAL EDUCATION, ELEMENTARY EDUCATION, AND SECONDARY EDUCATION STUDENTS

James Mainord, Kathleen Atkins, and David Naylor, University of Central Arkansas,
and James Whorton, University of Southern Mississippi

Although studies have demonstrated differences in the knowledge base and beliefs toward inclusion among students pursuing degrees in special education, elementary education, and secondary education, it was not clear which skills and beliefs were responsible for the disparity. Obviously, the training received by special education students contributed largely to the differences.

The present study was conducted with a population of 230 teacher education students pursuing undergraduate and graduate degrees at the University of Central Arkansas. The population consisted of 94 undergraduate students and 136 graduate students in special education, elementary education, and secondary education. The students responded to the Inclusion Beliefs and Knowledge Questionnaire, which consisted of a 14-item knowledge/skills component and a 20-item beliefs/attitude component. A factor analytic solution was chosen for this study to summarize and to integrate arrays of data in the correlation matrix of the beliefs/attitude component. The varimax rotation solution reduced the data into a manageable unit by determining the variance that was common to the measures. A second reason for the use of the factor analysis was to obtain computer-generated factor scores for the subjects. Factor scores were actual scores of subjects obtained on the factor. The score represented a linear transformation of the subjects raw scores concealed in the factor loadings. This score represented an estimated score for the subjects on the factor.

The statistical model used to predict knowledge/skills of inclusion was the multiple linear regression technique. The relationship of the variables in the regression enabled the investigators to determine the amount of variance in knowledge/skills by a linear combination of the factor scores. By treating the data in this manner, the investigators were able to determine the amount of variance in knowledge/skills accounted for by the factors representing the beliefs/attitude measures.

COMPLETION OF ENGLISH 1 AS A PREREQUISITE TO INTRODUCTORY PSYCHOLOGY

Anthony J. Guarino, Auburn University, and Jo-Anne E. Schick,
State University of West Georgia

Introductory psychology courses at community colleges experience attrition rates as high as 60%. To curb this high rate of attrition, some institutions have established an English 1 (college writing) prerequisite. This English 1 prerequisite was instituted because many community college students are deficient in basic English skills. The primary objective of this research was to evaluate the validity of completing English 1 as a prerequisite to an introductory psychology course at community college.

Participants were 11,139 students enrolled in an introductory psychology class within the last three years at a large urban community college in the southwest. All students were high school graduates, and slightly more than one-half were females (55%). The student population was ethnically diverse: 20% white; 20% Mid-Eastern; 20% Asian; 10% Latino; 5% black; and 25% "Other." Sixty percent of the students planned to transfer to a four-year institution; whereas 25% were undecided about their reason for attending.

A stepwise regression was used whereby predictors were selected in order of importance with both entry and removal of variables possible at each step. Predictive variables were: (1) number of semesters attended, (2) units enrolled while attending Psychology 1, and (3) completion of English 1. The criterion variable was course grade (A to F). Students who withdrew from the course were removed from the analysis.

Results of the stepwise analysis indicated that English 1 accounted for the largest explained variance in final grade ($R = .187$, $p < .001$). This was followed by units enrolled while attending the Psychology 1 course and number of semesters attended (increases of variance of .004 and .002 respectively for a $R = .203$, $p < .001$. Implications of this study were discussed for requiring English 1 as a prerequisite for an introductory psychology course.

9:00 a.m.-9:50 a.m. **STUDENT MOTIVATION**
Session W#005 **(Symposium)** .... **Salon E**

ORGANIZER: Jenefer E. Husman, The University of Alabama

PERSPECTIVES ON MOTIVATIONAL RESEARCH AND THEORY

Introduction

Motivation in education is a growing area of interest among both educational researchers and practitioners. As schools become increasingly responsible for the motivational and emotional health of their students, motivational theory has become an increasingly important part of the knowledge base of instructors and administrators. The authors of these papers linked modern motivational theory to developmental and foundational issues in education. It is the intent that these connections expand the audience's understanding of the powerful implications of modern motivational theory.

An Analysis of Preservice Teacher Perceptions of Instrumentality Through the Lens of Epistemological Theory

H. Michael Crowson, The University of Alabama

Discussed ways that preservice teachers' epistemological beliefs (Kitchener & King, 1990) may impact their motivation for learning material.

A Consideration of Moral Motivation and the Effects of Future-Time Perspective

W. Pitt Derryberry, The University of Alabama

Integrated advances in the literature of both moral and motivational psychology. Specifically, he argued that Future-Time Perspective (Lens & Rand, 1997) and the resultant instrumentality may serve to bridge the gap between moral reasoning and moral action (Blasi, 1980; Kurtines & Greif, 1974).

Flow and Gender in the Learning Environment

Rebecca Michael Ballard, The University of Alabama

Argued that the experience of flow, which lies between boredom/challenge and anxiety/skill (Csikszentmihalyi, 1990) is an experience that may be influenced by one's gender and one's socialization, especially in educational environments.

The Possibilities of Multiple Perspective Research in Motivation and Self-Regulation

Nate McCaughtry, The University of Alabama

Proposed that incorporating multiple modes of inquiry such as interpretivism (Schempp & Choi, 1994) and critical inquiry (Fernandez-Balboa, 1997) may expand the degree to which social cognitive theory can be understood.

Jenefer E. Husman, The University of Alabama, served as discussant for the session and provided a framework for integrating these diverse perspectives on ways that modern motivational theory may be expanded to include developmental and foundational issues in education. Following her brief discussion, a five-to-ten-minute period for audience questions and discussion was provided.

9:00 a.m.-9:50 a.m. **GENDER ISSUES**
Session W#006 **(Discussion Session).. Salon F**

PRESIDER: Cynthia Gettys, The University of Tennessee at Chattanooga

A COMPARISON OF UNDERGRADUATE WOMEN BETWEEN GUAM AND JAPAN: THEIR GENDER AWARENESS AND STATUS ASPIRATIONS

Yukiko Inoue, University of Guam

This study examined women's realization toward the quality of life, identifying their gender awareness and status aspirations. The purpose of this study was to achieve a better understanding of how undergraduate women would become aware of gender equality in employment and how that would affect their academic and social status goals. Another purpose was to achieve a better understanding of how the life-course selection of women would be associated with their status aspirations.

University of Guam in Guam and Tokiwa University in Japan were selected as sites for the survey. The survey questionnaire (consisting of five sections: aspirations, awareness, self-evaluation, life-course selection, and background information) was mailed to 350 randomly selected women of each university. Response rates for both sites were 32 to 35%. The participants were asked to rate items on the Likert scale (5 = of utmost importance, 1 = not important at all).

In comparing Chamorro (Guamanian) and Japanese women's priorities of the awareness and aspirations, *t*-tests were used to determine the significant differences for all individual items between two groups; then means and standard deviations were arranged in the descending order. Analysis of variance was used to test the hypotheses: (1) Significant differences exists between Chamorro and Japanese women in the life-course selection, (2) Significant differences exit between traditional and non-traditional aged women in the life-course selection, and (3) An interaction exists between age and nationality in the life-course selection.

On the assumption that these women, as a group, would show patterns of their awareness and aspirations, the focus of the study was on formulating a statistical profile of undergraduate women. The results and interpretations were documented in detail, along with general implications and future directions of the study.

UNDERGRADUATE SCIENCE STUDENTS: WHAT DO THEY WANT TO BE WHEN THEY GROW UP?

Debbie L. Hahs, The University of Alabama

Can it be determined what the predictors are for students entering and persisting in science-related occupations and if there are significant differences in gender and ethnicity? The purpose of this study was to examine a limited number of variables that have been documented in literature as influential factors for women science majors and determine which significantly influence undergraduate student expectations to obtain science-related occupations.

A survey was administered at a large southeastern research university during February 1999 to students enrolled in the first two required biology courses for majors in biology, microbiology, pre-health, and marine science. One hundred eighty surveys were completed. Of that number, 169 were usable.

The independent variable was whether or not the student expected to work in a science-related occupation. The dependent variables included: course enrolled in, gender, ethnicity, whether or not the guardians worked in science-related occupations, the degree to which the student liked science, and whether the student believed science was important to everyone's life. Because the independent variable and numerous dependent variables were dichotomous in nature, logistic regression was the regression method chosen to conduct the analysis.

The final model generated by the backward logistic regression included the following independent variables as predictors of the student entering a science-related occupation: whether the student liked science ($p<.001$), gender ($p<.05$), course ($p<.10$), and father's occupation ($p<.10$).

The results of this study indicated several factors worthy of attention including some factors contradictory to current literature. These all have implications for future research for educational practices. The findings contributed important information to the existing literature on factors predicting science occupation choice-especially in reference to undergraduate students in their first required science courses. It also raised interest in the possibility that there were significant changes that took place between postsecondary and collegiate experiences.

A COMPARISON OF CAREER ASPIRATIONS AND MATH ANXIETY BETWEEN MIDDLE SCHOOL FEMALES IN SINGLE SEX AND COED SETTINGS

Kathleen T. Campbell, Academy of the Sacred Heart (LA), and
Yvonne Adler, Susan Beatty, and Judith Scott,
St. Charles Parish (LA) Schools

Despite a significant increase in the number of females entering math/science careers in the last several decades, females still lag behind males in many math- and science-related fields, such as engineering. The math/science career gap between males and females is important because the prestigious, high paying jobs are in the math and science fields. This gap is also an enigma because females usually outperform males in all subjects, including math and science, during the early years of elementary school. The literature contends that middle school is the critical period when many females lose confidence in their abilities, especially in math and science.

The present study examined career interests and math anxiety levels among seventh- and eighth-grade females enrolled in an accelerated mathematics class. One group of females attended a single sex school, while the other group of females attended a coed school. Subjects were administered Choices, Jr., a career interest inventory, and the Mathematics Anxiety Rating Scale for Adolescents (MARS-A), a self-report inventory on math anxiety. Responses were correlated to determine if there was a relationship between math anxiety and career interests. The responses from the females in the single sex institution and the coed school were compared to determine whether classroom setting was a significant factor in career interest and math anxiety.

A discussion of the results included generalizations concerning the philosophical differences between single sex and coed schools as well as pedagogical implications for classroom practices.

10:00 a.m.-10:50 a.m. **ADMINISTRATION AND LEADERSHIP**
Session W#007 **(Discussion Session)**.. **Salon A**

PRESIDER: Debora Adler, University of Central Arkansas

TEACHER PERCEPTIONS OF THE PERFORMANCE AND PERSONAL QUALITIES OF THEIR BUILDING PRINCIPALS

Otis K. Lovette, Northeast Louisiana University

This research used a Principal Profile survey form to investigate teacher perceptions of their building principals in the areas of Management, Relationships, Delegation, and Personal Qualities. The survey also asked for several types of demographic information that were analyzed statistically. Items such as size of school, grade levels of school, sex and age of the principal, and sex and age of the responder were included. The survey form was constructed and administered with intent to further refine the instrument though additional administrations and statistical analysis.

Student input regarding the characteristics of effective principals was obtained from teachers who were taking graduate courses in educational leadership during the fall of 1998. This information was supplemented with information from various writings and research studies to develop the survey form.

Students taking graduate courses in educational leadership completed the survey during the spring of 1999. Even though the completed surveys provided a wealth of information that could be used in a variety of ways, those items within the survey that related to empowering-type behaviors were the main element investigated.

The descriptive data provided useful information, and various correlational relationships were investigated. The analysis of responses indicated that these particular principals were not using "empowering type" approaches when leading their schools.

SUPERINTENDENT COMPETENCIES FOR CONTINUED EMPLOYMENT AS PERCEIVED BY LOUISIANA PUBLIC SCHOOL SUPERINTENDENTS AND SCHOOL BOARD PRESIDENTS

Michael Peterson and Jack Klotz,
University of Southern Mississippi

The purpose of this study was to determine if there were differences between perceptions of Louisiana public school district superintendents and school board presidents on the variable of superintendent competencies needed for continued employment. Nine competency areas of superintendent responsibility were identified for the purpose of this study: public relations, school finance, personnel management, curriculum development, policy formulation, school construction, accomplishment of goals set by the Board, superintendent/board relations, and collective negotiations. The study was designed to also determine if the variables of age, gender, years of experience, and district size had an impact on differences of perception held by respondents. Additionally, the study identified those competencies that when performed unsatisfactorily, would most likely cause a superintendent's dismissal. The target population of the study included all superintendents and school board presidents of public school districts in the state of Louisiana. Results of the study were reported based upon an 80% response rate from superintendents and a 75% rate of response from school board presidents.

Within the program's presentation, participants received information on the overall findings of the study, resulting in conclusions related to continued employment of Louisiana public school superintendents, and recommendations for area of further study relative to this issue.

REASONS FOR LIMITED TENURE AMONG INDEPENDENT SCHOOL ADMINISTRATORS

Daniel L. Carden, The University of Alabama

This study researched the reasons for the average tenure of two years among independent Christian school administrators. The independent school progress has generated much discussion in areas of school choice, vouchers, and equality, but a deficiency in the quality and longevity of administrative leaders leaves room for viable questions. Preliminary research in the literature indicated similarities with public school superintendents in the areas of educational training and job descriptions. Major differences of a philosophical nature highlighted a uniqueness of an individual who would accept the independent school position. Many negative consequences were documented relating to a brief term of office for the head of the school.

Both qualitative and qualitative methods were employed in the ongoing study. Random sampling was done to obtain a representation of schools from the Association of Christian Schools International, an organization with over 8000 administrators, to draw a sample size of 500 heads. Focus groups were utilized at administrative conferences to obtain qualitative data that was factored into quantitative surveys. The surveys were then distributed by mail to the recipients. Results from the survey were tabulated and analyzed.

Preliminary results indicated two-fold reasons for departure. Although the majority of the separations were voluntary on the part of the administrator, many administrators were either asked to leave or it was made clear that their service to the institution was not appreciated. Board interference was significant in many of these cases. In the voluntary departures, a critical issue was that of finances with leaders unable to support their families. Upward mobility became a goal.

Implications for training methodology and educational preparation were obvious from this study. When problems were identified, solutions became apparent as well. Additional research is needed to tailor specific recommendations to guide new administrators in the consequences of their decisions.

10:00 a.m.-10:50 a.m. **TECHNOLOGY AND RESEARCH METHODS**
Session W#008 **(Discussion Session)**.. **Salon B**

PRESIDER: Michele Jarrell, The University of Alabama at Birmingham

AUGMENTING THE PROBLEM-SOLVING SKILLS OF STUDENTS THROUGH ELECTRONIC JOURNALS

Jennifer M. Good, Glennelle Halpin, and Gerald Halpin,
Auburn University

An important objective of any aspect of education is to enhance the problem-solving skills of students, but how to do so has remained a challenge. With advances in technology, new avenues have been opened. Teachers can pose problems, and students can offer solutions using means never before possible. The electronic journal is one new method being employed by teachers attempting to hone the critical-thinking skills of their students. Unfortunately, little research has been completed to assess the utility of this instructional aid . The purpose of this study was to illustrate the use of the electronic journal for dual purposes: to augment the students' problem-solving skills and to provide a medium to evaluate the effect on cognitive growth of having students solve real-world problems in the classroom.

Participants in this study were students (N = 25) in an engineering design course. As the students completed each of three case studies presented during the course, they recorded their thoughts, questions, and reflections in an electronic journal that was submitted to the instructor via e-mail. The students were asked to complete a series of questions generated to probe their thinking. They were also asked to record their goals, methods, and evaluations of progress during each individual work session.

Using a rubric based on a definition of problem-solving, an independent rater read and coded the journal responses. Examples of problem definition, examples of analysis, and examples of evaluating alternative problem solutions were among the categories used. In addition, the rater also considered statements that demonstrated students' self-evaluations and monitoring of progress as well as evidence of connections between theory and practice.

Through the electronic journals, the students showed evidence of defining their problem-solving skills and refining their thinking abilities. Hence, the study has both instructional and assessment implications for classroom practice and program evaluators.

ELECTRONIC VS. TRADITIONAL RESEARCH CLASSES

Robert L. Kennedy, University of Arkansas at Little Rock

The purpose of the study was to compare electronic mail and more traditional approaches for teaching graduate introductory statistics classes. The electronic course was first offered in the fall 1995 with the fall 1998 semester being the most recently included. There were 13 participants in the electronic classes, 66 in the traditional classes, and 22 in both groups, with a diversity of graduate education students. Multiple-choice pretests and posttests were given, developed from standardized test preparation manuals available for purchase in academic bookstores.

An analysis of covariance (ANCOVA) was run using posttest scores as the response variable and pretest scores as the covariate. Since the ANCOVA technique involves features of both the analysis of variance and regression, assumptions for both were tested using the NCSS statistical program, version 6.0.21. The assumption of random selection was not possible since participation in the electronic mail version of the course was optional. Normality and homoscedasticity across all groups were verified using the Omnibus Normality of Residuals and Modified-Levene Equal-Variance tests. Homogeneity of regression was observed in scatterplots of pretest scores versus posttest scores and their trend lines, by treatment and control groups. Therefore, the assumptions required for ANCOVA seemed to be reasonably well met.

The test indicated that the null hypothesis of no statistically significant difference among the traditional (adjusted mean of 6.96, n=66), electronic (adjusted mean of 7.20, n=13), and both traditional and electronic (adjusted mean of 7.22, n=22) classes' scores could not be rejected at the 0.05 level [F(1,97)=0.11, p=0.89]. It was concluded, then, that offering the course through electronic mail or a combination of electronic mail and the traditional approach did not appear to hinder the performance of the students to the extent measured by the multiple-choice tests.

THE EFFECT OF ADVANCE ORGANIZERS ON ACHIEVEMENT IN GRADUATE-LEVEL RESEARCH METHODOLOGY COURSES

Denise DaRos, Youngstown State University, and
Anthony J. Onwuegbuzie, Valdosta State University

In an effort to increase achievement levels in graduate-level research methodology courses, some instructors are using advance and post organizers. However, to date, a paucity of studies appears to exist examining the effectiveness of this instructional technique in these courses. This was the purpose of the present study. Although a myriad of studies has been conducted during the past three decades assessing the effectiveness of advance organizers, few of these investigations have been undertaken at the graduate level.

Subjects comprised 218 students, enrolled in a mid-southern university's graduate-level research methodology courses. Fifty-four students were enrolled in sections in which advance and post organizers were used; 164 were enrolled in sections in which this method of instruction did not take place. Conceptual knowledge, involving students' command of research concepts, methodologies, and applications, was measured individually in both sets of classes via mid-term and final examinations.

Findings revealed that students enrolled in the advance organizer sections of the course obtained higher levels of overall achievement than did their counterparts. The effect size pertaining to this difference was .54, which is considered moderate. The implications of these findings were discussed, as were recommendations for incorporating advance and post-organizers in research methodology courses.

10:00 a.m.-10:50 a.m. **EFFECTIVE TEACHERS, EFFECTIVE INSTRUCTION**
Session W#009 **(Discussion Session)**... **Salon C**

PRESIDER: Rodney Woods, del' Epee Deaf Center

THE MASTER COLLEGE TEACHER: CHARACTERISTICS AND BEHAVIORS

Linda W. Morse, Mississippi State University

What are the characteristics of a master college teacher? Despite the relative lack of research into effective college teaching, the emphasis on quality instruction at the collegiate level remains a top priority at many institutions. The present study investigated effective teaching characteristics demonstrated by college teachers designated as master teachers within their institutions in contrast to previous studies, which solicited student opinions regarding effectiveness.

Utilizing qualitative techniques, the present study employed collection techniques by observation and interview of two master teachers. These individuals were both professors in their respective fields with an average of 25 years teaching experience in higher education. In addition to their designation as master teachers, each had received at least two other major teaching awards. Data was collected from observing the master teachers as they presented typical one-hour lectures. Follow-up interviews were also conducted. The observations were analyzed for (a) effective instructor behaviors demonstrated and (b) effective instructional strategies utilized. Structured comparison matrices between the master teachers and their effective behaviors were made. Interviews were conducted on the master teachers' opinions on effective characteristics and training of pedagogical skills.

Observations common to both instructors involved clarity of explanation, use of teaching objectives, variation in voice, evidence of highly planned instruction, sharing of personal perceptions, use of instructional aids, and skill in question-asking. Effective use of examples was demonstrated, although their styles varied. Each master teacher's involvement in research was evident and was incorporated into the lectures. Humor was used, but not as joke-telling behavior. Finally, the teachers exuded enthusiasm for their subjects.

The implications of this study are (a) the master college teacher exhibits behaviors which can be used to illustrate the mechanics of good college teaching that would aid beginning instructors or those wishing to improve their techniques, and (b) identifying directions for new research.

EVALUATING INSTRUCTIONAL EFFECTIVENESS

Howard H. Cochran, Jr., Belmont University; Joachim Zietz,
Middle Tennessee State University; and Mark L. Wilson,
University of Charleston

Student evaluations of instructor performance are in wide use across the U.S. and often play a key role in administrative decisions on job tenure, promotion, and merit pay. Even strong supporters of student evaluations admit that student ratings may suffer from some halo effect, have only a modest association with common criteria of effective teaching, and are probably affected by some potential sources of biases.

Instructional effectiveness for a particular class is assessed by comparing an instructor's actual evaluation score with the one that is predicted for the class rather than with the average score for all other instructors teaching the same class. The prediction is based on a random-effects regression model of the evaluation score on potential sources of bias such as student, class, and teacher characteristics that are not under the control of the instructor. Instructional effectiveness was measured in this manner for a student evaluation of teaching score and an objective, knowledge-based test score for 49 classes/instructors of principles of economics taught at comprehensive universities. The data were drawn from the Test for Understanding College Economics III database.

The results confirmed that instructional effectiveness was influenced by factors not under the control of the instructor. Additionally, there appeared to be a weak correlation between instructor rankings based on student knowledge versus rankings based on student opinion. Consequently, an overall measure of instructional effectiveness was constructed as a weighted average of the ratio between actual and predicted scores for both evaluation measures. The extent to which student opinion on teaching effectiveness entered the equation rather than actual knowledge gained was easily varied by changing the weight given to student evaluations. The methodology adopted in this paper can be adapted to any university, college, or department to make teaching assessment more meaningful.

10:00 a.m.-10:50 a.m. **SCIENCE EDUCATION**
Session W#010 **(Symposium)** .... **Salon D**

ORGANIZER: J. Reid Jones, Delta State University

A CONVERGENCE OF RESOURCES: MATHEMATICS AND SCIENCE INSTRUCTION IN THE RURAL DELTA

J. Reid Jones, Delta State University

Overview

This symposium described distinctive difficulties facing mathematics and science instruction in the rural Mississippi Delta. With a tradition of low educational achievement, the Delta has also fallen behind most of the country in terms of access to rapidly expanding technologies. Progress reports were presented for six sponsored programs that had focused on mathematics and science teaching efforts in this region. Audience discussion emphasized ways that these programs can interface to address improvement in elementary schools through graduate programs.

Approaching Elementary Students: Music, Mathematics, and Science

Orlando Moss and Deborah Ellis, Mississippi Valley State University

An informal curriculum was described that takes advantage of the fundamental relationships that music shares with mathematics and science. Examples demonstrated the motivational aspects of this approach at the elementary level.

The Rural Systemic Initiative in the Mississippi Delta

Charles Alexander, The University of Mississippi

Efforts to stimulate systemic reform in mathematics and science teaching were described that produce long-term changes in K-12 districts. Leadership workshops, technical assistance, team approaches, sharing resources, and building parental and administrative support were instrumental activities.

Undergraduate Mathematics and Science Education in the Delta

Richard Sullivan, Jackson State University, and J. Reid Jones
and Nita Thornell, Delta State University

The Louis Stokes Mississippi Alliance for Minority Participation (LSMAMP) has placed major emphasis on recruiting mathematics and science students from the Mississippi Delta. Pre-freshman summer bridge programs work with academic support programs to provide tutoring, mentoring, and scholarships for promising but underprepared students. The MENTOR project of LSMAMP has brought many science and mathematics students into teacher preparation programs and has provided services for the K-12 community in the Delta.

Mathematics and Science Staff Development and Inservice Programs for the Delta

James Sabatier and David Carter, The University of Mississippi,
and J. Reid Jones, Delta State University

Major grants from the Eisenhower Program have supported staff development in the Delta. Physics and applied mathematics demonstrations showed the audience how high-technology, low- cost laboratory experiences have been brought to 19 Delta school districts. A state-supported teacher effectiveness laboratory and a consortium of 32 districts promoted educational technology for the region.

Making the Graduate Program Responsive to Teacher Education Needs in the Delta

John G. Thornell and Henry Outlaw, Delta State University

Enriched graduate school opportunities for K-12 teachers in the Delta were described that provide graduate tuition scholarships and intensive summer courses at state parks. Using the expertise and resources from programs in this symposium, unique master's degree programs have been devised to meet the needs of Delta teachers.

Discussion

One reason that these sponsored programs have worked effectively together is that most of the project directors are close acquaintances, sharing a commitment to the educational advancement of a specific region. Audience and participant discussion produced new ideas and approaches that will make these diverse programs work even more effectively together.

10:00 a.m.-10:50 a.m. **SOCIAL SCIENCE AND RESEARCH METHODS**
Session W#011 **(Training Session)** .... **Salon E**

TRAINER: Ira A. Bogotch, University of New Orleans

DISCOVERING AND USING YOUR CONCEPTUAL FRAMEWORK

This session was designed for graduate students attending MSERA with or without their dissertation advisors [both are welcomed here!]. First discussed were various meanings of the term "conceptual framework" and how it relates to doing educational research. Then, participants actively constructed a broad outline of their own research proposal seeking to identify embedded assumptions in their research topics/questions, reasons for using specific definitions and categories, the role of personal needs/interests, favorite authors, and seminal books and articles. Graduate students were asked if they should pursue new directions or build upon the works of others, and look for other alternative paths (inside of both traditional research paradigms and non-traditional approaches). The session concluded with practical questions regarding the relationship of conceptual frameworks to different methodologies, the dominant preferences of different fields of studies, as well as the preferences of major professors and dissertation committees, and which conceptual frameworks, if any, to avoid.

10:00 a.m.-10:50 a.m. AT-RISK STUDENTS AND GIFTED EDUCATION
Session W#012 (Discussion Session).. Salon F

PRESIDER: Barbara M. Ray, The University of Tennessee at Chattanooga

SUSTAINED EFFORT, LITTLE RETURN: THE WOEFUL ASSESSMENTS RESULTS OF AN AFTER-SCHOOL TUTORING PROGRAM

Dennis C. Zuelke and J. Gordon Nelson,
Jacksonville State University

The problem is the process and outcomes involved in an after-school tutoring program after four successive years of assessments. A nonprofit community based agency has operated an after school tutoring program for at-risk children, grades 3-12, in cooperation with a city school system. Two professors from the College of Education at a local university agreed to assess the reading and math outcomes for the tutored students during the last four years.

Every year, 1996-99, data were collected at each of the up to eight schools where tutoring took place using a common template of variables, variable definitions, and numerical matrix. Up to 290 tutees per year were subjected to the assessments. Twelve independent variables were used with two dependent variables, reading and math end-of-year grade point averages. Among the independent variables were hours tutored, type of tutoring program, kinds of tutors used, and tutee absenteeism. Each school's staff collected the data and entered them on a computer spreadsheet (Microsoft Excel) and prepared a computer diskette that was then given to the professors. The professors utilized SPSS software to analyze the data from the diskettes with descriptive statistics and single order correlations.

Contrary to the tutoring literature, the results indicated that tutoring did not improve reading and math grade point averages for the tutees. In fact, grade point average losses occurred each year for reading and three of the four years for math.

The professors have concluded that after school tutoring as practiced by the community agency did not work and, in effect, hurt the children who were exposed to it. The professors relied on the tutoring research literature to suggest improvements. The community agency made adjustments, the most dramatic in 1999, in which, finally, the math outcome was positive.

GIFTED EDUCATION: DON'T OVERLOOK THE DISADVANTAGED

Deborah Grubb Abell and Lesia Lennex, Morehead State University

It is often difficult to distinguish between truly gifted children and children whose background has been so enriched that they score extremely well on norm-referenced tests. On the other hand, students who come from economically and educationally disadvantaged families have often never had a book read to them, have not had developmentally appropriate and enriching materials to play with, and many have never been out of the county of residence. Every year students begin school who have never seen an elevator, never eaten in a restaurant (even McDonald's), and never been to a library or zoo. These students come to school ready and eager to learn but behind their peers in life experiences. It is often very difficult to identify the gifted children from this background. It is well documented that affluent white students are more likely to be enrolled in a gifted program than minority or disadvantaged children. There is a need to establish a method of identifying economically disadvantaged gifted students that does not penalize them because of poor performance on standardized norm-referenced tests. Performance-based assessment techniques may be preferable to standardized testing for identification of economically disadvantaged students.

The present study provided a chi-square and descriptive statistical analysis of the incidence of students who participated in the federal free/reduced lunch program who were identified for a gifted education program at three Kentucky middle schools. There were 2000 students enrolled in the three schools, and the free/reduced lunch incidence varied from 60% to 80%. A descriptive analysis was also made of identification procedures at the three schools with particular attention to provisions for the identification of economically disadvantaged students.

TAPESTRIES: A PHENOMENOLOGICAL STUDY ON THE EXPERIENCE OF TEACHING IN THE INCLUSIVE, ONE-TEACHER SCHOOL

Krystal Bishop, Southern Adventist University

This study explored the tapestry of experiences shared by teachers in inclusive, one-teacher schools. The purpose of the study was to enhance the understanding of teachers as users of personal practical knowledge.

A qualitative methodology was used. Four experienced teachers, currently teaching in inclusive, one-teacher schools, were asked to share their thoughts, feelings, and perceptions regarding the experiences they encountered on a regular basis. These experiences were shared through a series of phenomenological interviews, participant journal entries, and participant observations. The data were reported as impressionistic sketches, narratives of individual participants, and conversations constructed from responses gathered during data collection.

Data were organized according to (1) beliefs about teaching and learning, (2) what teachers' personal practical knowledge looks like on a day-to-day basis, (3) professional identity and efficacy, (4) contextual factors enabling and/or constraining practice as professionals, (5) isolation and accommodating diversity, (6) the role of professional development, and (7) themes that emerged from the data.

General emerging themes included: (1) teachers must assume numerous academic and administrative responsibilities not usually assumed by peers in traditional settings, (2) the lack of opportunities to collaborate and socialize with peers creates a feeling of personal and professional isolation, (3) the need for support is crucial, and (4) time is a critical factor.

These general, emerging themes formed the basis for a grounded theory that emerged from a constant comparative analysis of the data. The grounded theory was reported as assumptions, followed by recommendations related to each assumption. Assumptions and recommendations were made to (1) teacher education programs, (2) administrative bodies, (3) teachers, and (4) special education consultants. An implication was that the grounded theory be used in the development of a systems approach designed to more effectively meet the needs of those teaching in inclusive, one-teacher inclusive schools.

11:00 a.m.-11:50 a.m. ACHIEVEMENT
Session W#013 (Discussion Session).. Salon A

PRESIDER: Mary H. O'Phelan, Western Kentucky University

METACOGNITION AND ACADEMIC ACHIEVEMENT: PROMISE AND PROBLEMS

Lary C. Rampp, J. Stephen Guffey, and Steven G. Lesh, Arkansas State University

The literature is replete with discussions of school reform. Reform efforts are varied, but most focus on changing the institution without a concurrent effort to change the mind set of the organizational members. One major issue regarding reform efforts is that a large number of entering students drop out by the end of the first year. Retention of these students has become a significant concern in higher education. Arkansas State University, in particular, is very concerned about the why's of the 40% dropout rate of entering freshmen.

The selection of literature to be included in this review was carried out in a three-phase process. First, general descriptor terms were searched in the ERIC database. From this initial search a wide range of sources was identified. These sources were examined, and relevant pieces were retained. The second stage included the refining of the search descriptors based on the retained sources from the ERIC search. These refined descriptors were introduced to a wider range of online databases (Dissertations Abstracts, WorldCat, First Search, etc.). The final stage of selection was performed after reviewing the results of the second online search.

The researchers concluded that: (1) It is important that the reader grasp the unfolding of the literature based research into a workable research framework; (2) A number of workable solutions are available; and (3) The best include teacher and student alike. The best focus on developing a cognitive tolerance for ambiguity, respect for evidence, willingness to search for reasons and alternatives, willingness to withhold or reverse judgments based on facts, open-mindedness, and sensitivity to others.

Implementation of the studies discussed in this presentation could form a foundation to better equip the entering college student for the academic rigors of university study. Public schools do not teach metacognition. That responsibility is left to the colleges and universities.

THE RELATIONSHIP BETWEEN MULTIPLE SCHOOL TRANSFERS DURING ELEMENTARY YEARS AND STUDENT ACHIEVEMENT

Joanna E. Nash and Patrick Kariuki, Milligan College

The purpose of this study was to determine the relationship between multiple school transfers and academic achievement and to examine any difference in the academic achievement of mobile and non-mobile students. The sample for this study consisted of 105 sixth-grade students from a school system in northeast Tennessee. Data were collected through examination of school records to determine student mobility and achievement test scores. Data were analyzed using a Pearson's product moment correlation and one-way ANOVA. Results of the Pearson's Product Moment Correlation indicated a relationship between multiple school transfers and academic achievement. The analysis of variance indicated a significant difference in the test scores of students who moved zero or one time and two, three, or more than three times. No significant difference was found between students who moved two and three times or three or more moves or between three moves and more than three moves. The findings of the study indicated that students would benefit from programs to decrease school mobility.

11:00 a.m.-11:50 a.m. **GIFTED EDUCATION**
Session W#014 **(Symposium)** .... **Salon B**

ORGANIZER: Linda W. Morse, Mississippi State University

DOES LISTENING TO MOZART OR USING ELABORATED EXAMPLES ENHANCE THE DIVERGENT THINKING PERFORMANCE OF UNDERGRADUATES?

Overview

The Mozart Effect has gained attention during recent years as an apparently simple way of enhancing performance on certain kinds of cognitive tasks. Over a longer period of time, concern from many audiences has been voiced regarding how one might enhance the development of higher order thinking skills. This symposium was organized to present findings that, for the domain of divergent thinking, address these issues and extend our understanding of aspects of and influences on creative behavior. This symposium included three topics.

All presentations conveyed aspects of a study conducted on 91 volunteer students enrolled in undergraduate courses in Educational Psychology. The mean age was 20.6 yr (*SD* = 3.6). Most (82%) were female and classified as freshman or sophomore level (71%). Nineteen were African American (21%), 75% were Caucasian, and four represented other ethnic backgrounds.

Use of Elaborated Examples on Creative Thought and Divergent Thinking

Linda W. Morse and David T. Morse, Mississippi State University,
and Gregg A. Johns, Mississippi State Hospital

The influence of elaborated examples on divergent thinking scores-fluency, flexibility, and originality-was compared across four conditions. The conditions comprised: (1) control, (2) elaborated examples to encourage fluency of response, (3) elaborated examples for flexibility, and (4) elaborated examples for originality. It was proposed that elaborated examples to encourage fluency would yield higher fluency scores, and so on. Divergent thinking scores from two stimuli were used as the dependent variables. The results, though in the direction of the proposed outcomes, yielded small effect sizes, and were not statistically significant. It appeared that the elaborated examples condition was insufficient for eliciting noteworthy differences in divergent thinking scores.

Does the "Mozart Effect" Apply to Divergent Thinking Performance?

David T. Morse and Linda W. Morse, Mississippi State University,
and Gregg A. Johns, Mississippi State Hospital

Participants were randomly assigned to listen to either a 10-minute excerpt of Mozart (Sonata in D major, K488) or a progressive relaxation tape before completing two divergent thinking tasks. Whereas the total divergent thinking scores were observed to be higher for the group listening to Mozart (*M* = 29.3, *SD* = 12.7) than for those listening to the relaxation tape (*M* = 26.6, *SD* = 11.0), the difference was not statistically significant, and represented a small effect size (Cohen's *f* = .12). Other authors write of enhancing creative thinking by first "quieting the mind." It may be that listening to a classical music selection is as effective as listening to a relaxation tape for attaining this end.

Originality of Ideas as a Function of Serial Position: When Do Novel Thoughts Come?

Gregg A. Johns, Mississippi State Hospital

Are novel thoughts more likely to come early or later in a set of ideas? This study evaluated the serial position of responses to divergent thinking tasks that were awarded points for statistical infrequency. Originality scores were divided into "early trial responses" (originality scores occurring during the first half of a stimulus trial) vs. "later trial responses" (originality scores occurring during the latter half of a stimulus trial). Total early vs. late originality scores, across two divergent thinking tasks, were compared statistically. Results indicated that novel thoughts occurred statistically significantly more frequently during the latter portion of tasks (*M* = 2.09, *SD* = 1.67) than during the early portion of tasks (*M* = 1.62, *SD* = 1.41).

Audience Participation

Sample divergent thinking tasks were used to acquaint those attending with the types of creative behavior and scoring rubrics used. In addition, discussion of the findings and implications of the studies were encouraged.

11:00 a.m.-11:50 a.m. **INTERNATIONAL EDUCATION**
Session W#015 **(Discussion Session)**.. **Salon C**

PRESIDER: John R. Petry, The University of Memphis

TEACHING, LEARNING, AND WORKING WITH INTERNATIONAL STUDENTS: A CASE STUDY

D. Randall Parker, Louisiana Tech University

American institutions of higher education have historically been attractive to international students, especially those seeking advanced degrees. These students may be integrated into regular classes or, in some cases, matriculate through a program as a cohort. As international enrollments rise, it is increasingly important for faculty and administrators to better understand the needs and experiences of these students.

The purpose of this study was to conduct an indepth case study of graduate students from Taiwan who were pursuing a master's degree in education at an American university in order to better understand the experience from their perspective and to offer recommendations for improved practice. This was a constant-comparative study of over 100 students in six cohorts over three years. Data were collected through observing classes, informal/social events, and study sessions; open-ended interviewing of students, faculty and administrators; and reviewing documents. Data were triangulated to determine convergent and contradictory pattern,; content analysis was used to determine emerging themes, and a literature review was conducted.

The literature revealed that international students may have difficulties with (1) written and oral communication, (2) listening skills and academic vocabulary, (3) access to advising and counseling services, and (4) cultural misunderstandings regarding practice in the academy. The major themes that emerged from this study were (1) strong personal and professional relationships between students and faculty, (2) student commitment to excellence and task accomplishment, (3) adjustments in teaching style, pace, and timeframe of assignments, (4) strong advising, counseling, and community integration, (5) increased use of tutors, interpreters, and translators, and (6) increased cross-cultural awareness.

The findings indicated that the challenges of working with international students provided faculty opportunities for personal development and greater cultural understanding. Practice should be modified to better meet student needs, and in so doing, faculty may learn as much from international students as the students learn from their American university experience.

THE EVOLUTION OF A CROSS-CULTURAL EXPERIENCE FOR STUDENT TEACHERS

Mary Lee Hall and Amy P. Dietrich, The University of Memphis

For five semesters, students have chosen voluntarily to complete the second part of their student teaching in Birmingham, England and Konigs Wusterhausen, Germany. The use of journal and focus group data from 28 students and six faculty involved yielded a wealth of information on the success of the program. The aim of the program was to provide experiences for students in cultural "code switching." The research questions posed were: How well did students adapt to a different culture, and How did the experience affect their self-efficacy as teachers? Journals and focus group data were analyzed, and responses were coded to correspond to the two research questions. Coded responses were then categorized to determine any patterns.

Researchers found that the students were not experiencing a student teaching experience as envisioned in the format of the program in the states. They also found that administrators and teachers in the schools in England and Germany had very different ideas and opinions of what student teacher involvement in their schools should be.

Analyzed data depicted the extent to which students viewed the experience as positive or negative and how that related to their expectations of the international placement or the extent to which they were capable of being open-minded about unfamiliar school environments. Students all had different ideas of how the experience would relate to their teaching career. Students viewed their relationship with students from different religious and language backgrounds as a way to help them to relate to those students with backgrounds different from their own in their future classrooms.

Researchers shared for other institutions' enlightenment the process of change and growth over the past five semesters as their university reaches for the idea of "one world, one people."

11:00 a.m.-11:50 a.m. TESTS
Session W#016 (Discussion Session)..Salon D

PRESIDER: Jianliang Wang, Western Kentucky University

THE RELATIONSHIPS OF THE EMOTIONAL INTELLIGENCE INVENTORY

Martha Tapia, American School Foundation

The purposes of this study were to examine the relationship between emotional intelligence as measured by the Emotional Intelligence Inventory (EQI) and intelligence as measured by the Otis-Lennon School Ability Test (OLSAT). Other comparisons included measures of verbal and mathematics scores on the Preliminary Scholastic Assessment Test (PSAT), grade point average (GPA), and the demographic variables of ethnicity, gender, and levels of education of parents. A structural equation model was built with the variables that had a significant relationship with emotional intelligence. The sample included 319 high school students from the American School Foundation in Mexico City.

The resulting data showed a non-significant correlation of OLSAT scores and EQI scores, indicating a lack of relationship between the construct of emotional intelligence and general intelligence, and there was also a lack of relationship with academic achievement as measured by the PSAT. A significant correlation was found with grade point average. There were no significant differences when EQI scores were grouped by ethnic background, level of education of mother, and level of education of father. Females scored significantly higher on the EQI than males. The analysis of the structural equation model built indicated a Goodness of Fit Index of 0.993, a Root Mean Square Error of Approximation of 0.0489, and a chi-square of 5.123 with three degrees of freedom and $p = 0.163$. These three statistics were sufficient to verify the model.

A VALIDITY STUDY COMPARING THE ACT AND THE HOBET ENTRANCE EXAMS ON HEALTH CARE STUDENTS

Barry G. Schultz and Ernest A. Rakow,
The University of Memphis

The study examined the relationship between the ACT and the HOBET (Health Occupations Basic Entrance Test) entrance exams. The purpose of the study was to: (1) check the validity of the HOBET as a predictor of student success and (2) compare the two exams as predictors of GPA for students in the health-care field. Nearly 60% of college freshman for the fall 1998 semester took the ACT (Reisberg, 1998). Newly proposed guidelines on admissions criteria by the Education Department's Office for Civil Rights took a firm stance against admissions criteria that relied on entrance exams as the primary tool for admissions decisions (Healy, 1999). Therefore, colleges needed to take a close look at the entrance criteria that they used to make these decisions.

The sample consisted of 320 students from a small, private, health-care oriented college located in the Mid-South. The degrees pursued by the students included bachelor degrees in Nursing, Radiology, and Respiratory Care. The data were compiled from the fall 1995 semester to the fall 1998 semester. The variables examined included ACT scores, HOBET scores, scores of sub-parts of the exams, total credit hours, and GPA. All students were given the HOBET only after making a 20 on the ACT.

The results were that the two exams were correlated on the sample. Both exams were also correlated to GPA. The HOBET exam was found to be a better predictor of GPA than the ACT. Although the two exams were correlated, the correlation coefficient was smaller than ones found in previous studies. This was probably caused by the homogeneity of the sample

THE MATHEMATICS ANXIETY QUESTIONNAIRE: A SIMULTANEOUS CONFIRMATORY FACTOR ANALYSIS ACROSS GENDER

Richard Kazelskis and Carolyn Reeves-Kazelskis, University of Southern Mississippi

Following the ideas of Liebert and Morris (1967) in their work in the area of test anxiety, Wigfield and Meece 91988) developed the Mathematics Anxiety Questionnaire (MAQ). The MAQ was designed to measure both cognitive and affective aspects of mathematics anxiety. The MAQ was developed using samples of school-aged children in fifth through twelfth grades. The initial pool of items gathered by Wigfield and Meece was factor analyzed using exploratory techniques and two factors identified as Worry and Negative Affect Reaction were identified. The two factors were later further substantiated using confirmatory factor analysis.

Because the MAQ was developed using school-aged children, it is unclear whether or not the Wigfield and Meece factors will hold for a college population. Additionally, the MAQ was derived using samples in which male and female responses were combined, so the question of possible different factor structures for male and female respondents has yet to be resolved.

The present study used responses of college-age samples of 135 males and 173 females, in a two-group simultaneous confirmatory factor analysis to see if the two-factor model identified by Wigfield and Meece would hold for college-aged males and females.

The two-group simultaneous confirmatory factor analysis resulted in a ratio of the chi-square goodness of fit to degrees of freedom, which was less than 3.0, and a root means square error of approximation (RMSEA) of .08. However, the goodness of fit index (GFI) and the normed fit index (NFI) were each in the .80's, short of the value of .90 generally indicative of good fit. Overall, the two-factor fit was not exceptional, but it was deemed reasonable.

11:00 a.m.-11:50 a.m. PROFESSIONAL DEVELOPMENT
Session W#017 (Discussion Session)... Salon E

PRESIDER: Malenna Sumrall, The University of Alabama at Birmingham

FACTORS DETERRING PARTICIPATION IN PROFESSIONAL ACTIVITIES

Jacquelyn P. Robinson-Horne and Katie Welch Jackson, Auburn University

This descriptive study, the first of two parts, investigated factors preventing county extension agents from participating in professional development activities, such as inservice training, continuing education, and formal coursework, designed to help them grow as professionals.

The Deterrent to Participation Scale-General (DPS-G) and an 11-item demographic questionnaire were mailed to 520 systematically selected county extension agents from 13 states. The DPS-G consisted of 34 Likert-like items, which were divided into eight factors. Response choices were designed so that a higher degree of agreement indicated a deterrent to participation. Descriptive statistics were used to develop a respondent demographic profile and to determine which factors, and more specifically which items within each factor, received the highest rating as preventing agents from participating in professional development activities. Findings from this study were compared to those from a previous study using the DPS-G. The reliability coefficient, coefficient alpha, was .92.

Of the 321 responding, 258 (80%) were white, 174 (54%) were female, 191 (60.4%) were over 41 years of age, and 237 (74%) were married. An item analysis revealed that the five items with the highest means were inconvenient location, inconvenient time, away from family, time required for completion, and lack of interest. Of the five items with the highest means, two were from the factor Time Constraints and two were from the factor Lack of Convenience. In this study, the mean ranking of items was similar to those in an earlier study. The two items with the highest means were in reverse to the earlier study, and two of the other three items among the five with the highest means.

The findings of this study indicated that relationships existed between selected independent demographic variables and the factor structure. The findings also have implications for extension administration in designing and offering professional development opportunities.

DEVELOPING AND SUSTAINING TEACHER COMMUNITIES: CARING AS CENTRAL IN TEACHERS' NEGOTIATION OF READING INSTRUCTION AND CURRICULUM IMPLEMENTATION

Kristen Weeks Neal, Tennessee State University

Implicit in the argument for school reform is that supporting teachers' ongoing learning about practice holds possibilities for improving student learning. In schools where teachers are attempting to move toward more innovative student-centered pedagogy, teachers work with their colleagues in multiple ways as they learn how to learn together and facilitate each other's inquiry into practice. However, reformers often assume that mutual support, experimentation, and risk-taking with colleagues emerges instantaneously when teachers commit to a common goal. In reality, communities that engender these behaviors pay close attention to the relational aspects of learning.

This project was based on a larger ethnographic study that investigated the development and sustenance of a first-grade teacher community in a public school during the 1997-98 school year. Eight first-grade teachers and the principal were participants in this study. The teachers worked together as a grade-level team within the larger school community. Data consisted of extensive audio-taped observations of team meetings, semi-structured interviews, group reflections, informal conversations with the teachers and artifacts that included meeting agendas and curriculum the team developed. Qualitative data analysis developed from three major constructs of the teachers' dialogue: invitations to the dialogue, shared values, and problem solving.

Through two lines of inquiry by the team- - one that explored how the teachers addressed the diversity of students' reading levels, and one that explored how they worked with a new systemwide mandated curriculum- - the dialogue revealed how caring relationships were constructed. Implications of this study suggested that caring matters for the development and sustenance of communities that allowed for members to be tentative, take risks, and experiment with innovation. Furthermore, this study suggested that changing hierarchical patterns of interactions of school members and developing school-based and organizational support to foster caring relationships was critical for school communities.

A PERSONALITY DYNAMICS MODEL FOR THE SELF-EVALUATION COMPONENT OF PERSONAL AND PROFESSIONAL DEVELOPMENT

Edith A. Miller and Donna Pascoe, Auburn University

This evaluation model was designed to serve as a self-evaluation component to be used in conceptualizing and implementing personal and professional development plans. The theoretical bases for self-evaluation are found in a variety of personality theories: psychoanalytic, inferiority/superiority, neurotic personalities, interpersonal perspectives, humanistic psychological perspectives, social-cognitive frameworks, needs and consequences, and other psychotherapeutic perspectives. Each of these perspectives (as well as others that might be identified as appropriate for the population/class membership) is studied with a view to understanding the underlying assumptions, the interface with individual personal and professional issues, and the potential of its concepts for planning and pursuing growth.

The evaluation model itself, beyond its theoretical bases, includes the following techniques to assist the individual in the self-evaluation process leading to plan development: journaling, shadowing, and spiritual guidance. (These techniques can be supplemented by others more specific to a particular personality perspective.) The second step in the self-evaluation process involves the use of these techniques and others in the development activities and supplementation of the activities with mentoring and coaching as the individual implements his plan. A final step involves the use of the initial self-evaluation procedures conducted to design the development experiences in a continuous evaluation of the growth activity.

The model in its developmental form has four dimensions: (1) the overarching theoretical frame of reference, (2) the methods for working toward insight from this frame of reference, (3) the ways of interpreting that insight with a view to planning development, and (4) an approach to continuous evaluation of the development plan. Procedures for drawing from more than one personality theory are included in the evaluation model.

11:00 a.m.-11:50 a.m. **BLOCK SCHEDULING**
Session W#018 **(Discussion Session)**.. **Salon F**

PRESIDER: Julie A. Holmes, Louisiana Technological University

A LONGITUDINAL STUDY OF TEACHER PERCEPTIONS AFTER ONE YEAR OF BLOCK SCHEDULING IMPLEMENTATION VERSUS TEACHER PERCEPTIONS IN THE FOURTH YEAR OF IMPLEMENTATION ON THE EFFECTIVENESS OF BLOCK VERSUS TRADITIONAL SCHEDULING

Laura C. Stokes and Joe W. Wilson,
University of North Alabama

The purpose of this study was to compare teachers' perceptions of the effectiveness of block scheduling after one year of implementation with their perceptions of effectiveness during the fourth year of implementation. Three hypotheses were used for data analysis. The study sought to determine the relationship between teachers' initial perceptions and their perceptions of effectiveness after extended use. The relationship between subject area taught and perceptions of effectiveness after extended use was determined. The relationship between years of teaching experience and their perceptions of effectiveness was examined. Teachers were also asked to identify the factors they perceived to be important in implementing block scheduling, the advantages and disadvantages of block scheduling, and the factors important in maintaining block scheduling as an effective curricular structure over a period of time.

The subjects were members of the faculties from the four schools who participated in the baseline data collection efforts during the 1996-97 school year. The 50-item Likert scale used in the initial data collection process was administered by one of the researchers to assure consistency of administration in all four schools. The instrument was administered during spring of 1999.

Data analysis revealed that teachers preferred block scheduling over traditional scheduling even after extended use. The predictor variables, "subject area taught" and "years of teaching experience," did not significantly correlate with the criterion variable "perceptions of effectiveness." The findings concerning the factors critical in implementing block scheduling, as well as the factors important in maintaining block scheduling as an effective scheduling pattern, have significant implications for school districts considering the implementation of block scheduling. Further, the findings of the study have implications for teacher educators preparing preservice teachers for teaching in block scheduling environments.

A STUDY OF STUDENTS' PERCEPTIONS OF THE EFFECTIVENESS OF BLOCK SCHEDULING VERSUS TRADITIONAL SCHEDULING

Joe W. Wilson and Laura C. Stokes, University of North Alabama

The purpose of this study was to determine the effectiveness of 4 X 4 block scheduling as perceived by students whose schools had been on the block for one year as compared to the perceptions of students whose schools had been on block for four years. The study sought to determine the relationship between isolated predictor variables and the criterion variable students' perceptions of effectiveness. Predictor variables included the number of years schools had been on block scheduling, type diploma students were seeking, teachers' experience with the block, and the variety of teaching strategies used in block classes.

The subjects included randomly selected students from two schools that had been on block scheduling for four years and randomly selected students from two schools that had been on block scheduling for one year. The two schools that had been on block scheduling for four years included 24 students from one school and 42 from the other. The two schools with less experience on block scheduling included 26 students from one school and 20 students from the other. Using a Likert scale consisting of 30 items, the same researcher administered the instrument to the four groups of students to ensure consistency in administrating the instrument. The subjects completed the instrument in a group setting during the last week of March and the first week of April, 1999.

Data analysis revealed that students perceived block scheduling to be an effective structural change in the schools. The relationships between effectiveness and the predictor variables outlined above were also determined. Additionally, students identified the advantages and disadvantages of block scheduling versus traditional scheduling. The findings and conclusions drawn from the study have important implications for public schools, and especially how teacher education programs prepare students to teach in block scheduled classes.

BLOCK SCHEDULING: AN ASSESSMENT OF STUDENTS' AND TEACHERS' PERCEPTIONS

Robert Calvery, Flippin (AR) School District, and Glenn Sheets
and David Bell, Arkansas Tech University

This was a study of students' and teachers' perceptions of block scheduling, which was used during the 1998-99 school year at Southside Public School System in Batesville, Arkansas. The participants in this study were 200 high school students and 23 high school teachers. Data collected from the surveys were used to compare students' perceptions on various areas related to block scheduling practices. The survey consisted of 12 Likert-scaled questions and three open-ended questions focusing on attitudes and perceptions to block scheduling.

Students in all areas preferred block scheduling to the more traditional seven-period schedule. Students' perception when first introduced to block scheduling was low, with only 2% thinking classes would be interesting. After a year of taking classes in a block schedule format the interest in classes increased to 36%. Some cited advantages by teachers included: more time with individual students, and students have few classes and teachers teach fewer students. Some cited disadvantages included that the block scheduling format is less forgiving of students' absences and the concern about the students' time between prerequisite courses.

Based on the findings and conclusions drawn from this perceptual survey, the Southside High School is considering a number of recommendations. These recommendations included the following: continuation of block scheduling for the upcoming school year, an ongoing staff development program related to block scheduling issues, and periodic monitoring and data collection to determine the success of the block scheduling.

12:00 p.m.-12:50 p.m. **SCIENCE EDUCATION**
Session W#019 **(Discussion Session)**.. **Salon A**

PRESIDER: Lee Napier, Jackson State University

EFFECTS OF SCIENCE MANIPULATIVES ON ACHIEVEMENT, ATTITUDES, AND JOURNAL WRITING OF ELEMENTARY SCIENCE STUDENTS REVISITED

Lynda R. Frederick and Edward L. Shaw, Jr., University of South Alabama.

This study reexamined aspects of a previous study of elementary science students' achievement, attitudes, and journal writing in conjunction with an Alabama Hands-on Activity Science Program (HASP) kit. This reexamination consisted of replication and expansion of the original study.

As with the original study, the sample consisted of fourth-grade students. Each group was taught a unit on electricity and circuits. A 15-item test was administered as a pretest and a posttest. The test consisted of application and knowledge level questions. The researchers developed a 12-item attitude survey that was administered before and after instruction. In addition to participating in both the test and attitude survey, subjects were requested to reflect on their participation by writing in journals. However, in the expanded study one group was given the same writing prompts as used in the original study, and the second group was given a variety of lesson-specific writing prompts.

Data collected were analyzed using a *t*-test. Significant differences occurred between the pretests and posttests. Results indicated that elementary students' achievement increased with the use of the kit and appropriate instruction. Additionally, the results of the attitude survey supported using science manipulatives as a means of increasing favorable responses towards science, science careers, and journal writing. Qualitative content analysis of the students' journals revealed changes in the quality and quantity of the reflective writing over the duration of the instructional unit. The replication of the study indicated that use of manipulatives had a positive effect on achievement and attitudes of elementary science students. In addition, the implication of writing prompts given in the original study yielded journal writings of lesser quantity and quality than those of the group given the varied and more lesson specific prompts.

A MODEL FOR THE SUCCESSFUL IMPLEMENTATION OF INSTRUCTIONAL TECHNOLOGY IN SCIENCE TEACHING

David R. Wetzel, George Mason University

This paper presented the ST4AIRS Model for overcoming barriers to science teachers as they implement and integrate technology in science. The model is based on current literature and research with inservice middle school and high school science teachers. Teachers' concerns when using technology in science were obtained through interviews and non-participant observations. The results of a literature review and findings of research revealed many barriers to teachers in the implementation and integration process of instructional technology. Several of these barriers include: time to learn how to use technology, adequate hands-on staff development opportunities, administrative support for training and planning, adequate funding, teacher involvement in staff development planning, and recognition for those teachers who are willing to give the extra effort to learn how to use instructional technology.

The ST4AIRS Model was developed to overcome the barriers revealed in the literature and research findings. The model's nine steps include: support for teachers, time for training, trainers that are qualified teachers who train other teachers, transition time for planning and integration, access to hardware and software, involvement in planning and integration by teachers, recognition for teachers, and staff development that meets the needs of the teachers. A holistic approach by education leaders in the implementation of this model will result in the successful implementation and integration of instructional technology by science teachers.

Implications, based on the literature and research findings, are that the components of the ST4AIRS Model provides a structure for the successful implementation and integration technology beyond the typical three to five year life span. The model has addressed teacher concerns, knowledge, and beliefs regarding implementation strategies. The ST4AIRS Model provides education leaders and teachers with a long-term systemic change framework to integrate instructional technology in science as emphasized in the National Science Education Standards and National Educational Technology Standards.

IMPROVING SCIENCE EDUCATION AT AN ECONOMICALLY DISADVANTAGED RURAL ELEMENTARY SCHOOL

Jack G. Blendinger and Lauren Rabb Wells, Mississippi State University

This case study focuses on an intervention by university researchers, serving in the role of participant-observers, to improve science education at an economically disadvantaged, rural K-6 elementary school by enlisting the assistance of administrators, teachers, students, parents, Smithsonian Institution, National Academy of Sciences, and Carolina Biological Supply Company in the process. Approximately 600 students, mostly African American, attended the school at which the intervention occurred.

Interest in improving the science education program at the school resulted from conversations between the principal and the two researchers involved in the project. The principal was pleased that a number of instructional improvements were occurring at her school, but disappointed with the quality of instruction in science. Owing to the university's commitment of service to the public schools of the state, the researchers accepted the challenge to help improve the school's science education program by working with the principal to gather baseline data, involve the school's stakeholders (teachers, students and parents) in the process, and solicit help from national associations and private corporations.

The paper described in step-by-step detail the method employed for gathering and analyzing baseline data, how the results were used to determine a practical course of action, and strategies for securing financial assistance. Resources made possible through focused effort enabled the school to pilot an innovative hands-on science curriculum during the 1998-99 school year that emphasized inquiry and promoted learning through discovery.

To motivate school staffs to improve science education, anecdotal cases, such as the one presented in this session, are needed for the continued development of the "best practice" literature base addressing science instruction. The findings presented in this case study make a meaningful contribution to that literature base.

12:00 p.m.-12:50 p.m. **STATISTICS**
Session W#020 **(Symposium)** .... **Salon B**

ORGANIZER AND CHAIR: Larry G. Daniel, University of North Texas

MINIMIZING PROBLEMS IN THE USE AND INTERPRETATION OF STATISTICAL RESULTS: A SYMPOSIUM FEATURING GRADUATE STUDENTS

Overview

In this symposium, three common problems associated with using and interpreting statistical results were discussed. Each problem was the focus of a separate paper presented by a graduate student in education. The papers included discussion of the several issues as well as presentation of data to illustrate various interpretation problems and solutions for them. Following the presentation of the papers,the audience was invited to ask questions and/or present their own views on the issues presented.

Statistical Significance Testing and Effect Size: What's Important in Interpretation of Results?

Ginny R. Lane, University of North Texas

For some years, researchers have recognized the importance of interpreting measures of statistical effect size. However, many researchers either omit or underemphasize effect size estimates. In this paper, several common effect size estimates were discussed. A small data set was utilized to demonstrate how reliance upon statistical significance without consulting effect size estimates can lead to erroneous conclusions. The author illustrated how interpretation of measures of effected size can provide the researcher with better information about the nature of results.

The Importance of Variance in Statistical Analysis: Don't Throw Out the Baby with the Bathwater

Martha Peet, University of North Texas

Because all parametric statistical methods are correlations, and because correlations are maximized when patterns of systematic variance across variables are present, it is important that researchers honor the variability present in their variables to the maximum extent possible. However, researchers frequently truncate continuous variables into nominal categories when utilizing certain statistical procedures. The author presented several examples to illustrate how these conversions distort the relationships among the variables of interest. Alternate analyses of the same data that preserve the nature of the original continuous variables were then presented.

Contingency Table Statistics and Educational Reliability: Problems with the Chi-square Statistic

Diann Rozell, University of North Texas

The Pearson chi-square tests can be useful in situations in which the researcher wishes to compare observed versus expected frequencies in categories or cells, of a contingency table. Although these tests can be useful, various problems associated with their use and interpretation are common. First, the author discussed reasons why the chi-square test is often the result of weak research questions. In addition, an educational research data set was used to illustrate that statistically significant chi-squares often do not inform the researcher about the contributions of the cells in the contingency tables, resulting in unclear conclusions or utilization of additional statistical tests, neither of which is a promising alternative.

12:00 p.m.-12:50 p.m. **PERFORMANCE ASSESSMENT**
Session W#021 **(Discussion Session)**.. **Salon C**

PRESIDER: Mary Jane Bradley, Arkansas State University

A PARTNERSHIP TO CREATE SUCCESSFUL SUBJECT AREA CURRICULUM AND BUILD EFFECTIVE PROFESSIONAL DEVELOPMENT

Tricia Bridges and Reuben Dilworth, Mississippi State University,
and Arlene Amos, Choctaw County (MS) School District

The purpose of this report was to discuss the efforts of the TIPS Teachers and Interns: Partners for Success (TIPS) consortium of school districts to develop curriculum that assists teachers with preparing students to move into analysis, synthesis, and evaluation on a daily basis and ultimately improve performance on state end-of-course assessments in Algebra I, American History, and Biology I. A proposal from the TIPS partnership involving Choctaw County Schools, Alcorn County Schools, New Albany Schools, Philadelphia Schools, Petal Schools, Mississippi School for Math and Science, and Program for Research and Evaluation of Public Schools (PREPS) and Mississippi Writing Thinking Institute (MWTI) of Mississippi State University was funded by the United States Office of Education through a Goals 2000 grant in the amount of $120,000. This Goals 2000 effort involved developing curriculum materials and a five-day professional development session during which teacher-presenters modeled effective teaching strategies to use in each subject area. Twenty-four classroom teachers were involved in development and presentation of the performance unit curriculum pieces. Seventy school districts sent 474 teachers to participate with 30 preservice teachers in 10 series of five-day professional development sessions located throughout the state of Mississippi.

This report centered on the effectiveness of the professional development as perceived by attending teachers. The following research questions were answered in the intensive final evaluation of the project: How effective was the TIPS Subject Area Training? and Will teachers use these curriculum pieces and instructional strategies in their daily practice? This research provided results of teacher implementation. The consortium has planned for further analysis of student performance during school year 1999-2000 using scores of the subject area assessments compared before and after this instructional treatment.

AN EVALUATION OF PERFORMANCE TASK INSTRUCTION IN THE ELEMENTARY SCHOOL CLASSROOM

Lorrie A. Howell, Kim Patterson, Tricia Bridges,
and Kay Brocato, Mississippi State University

This study was designed to answer the following questions concerning the effects of teaching with performance units: (1) How does teaching with performance units affect the results of students' standardized core battery assessment scores? (2) How does teaching with performance units affect the results of students' standardized performance assessment scores? (3) How does teaching with performance units affect the results students' experience of test anxiety and feeling of success during the testing situation? and (4) How does teaching with performance units affect teachers' perceptions of performance task instruction? This study followed a repeated measures design using fourth-grade students' ITBS scores as the dependent variable and the use of performance task instruction as the treatment effect or independent variable. An analysis of variance was completed using pre- and post-treatment ITBS scores to address questions (1) and (2) A post-treatment evaluation questionnaire was collected and used to gather qualitative data to questions (3) and (4).

Fourth-grade teachers participated in four days of professional development focusing on the use of daily performance task instruction to address lesson, unit, and course content. The staff development consisted of two initial eight-hour days of development activities during which teachers were (1) introduced to performance tasks, (2) worked through three performance teaching units, (3) evaluated completed examples of students' performance units, and (4) created an original performance task teaching unit. Two eight-hour follow-up days of development activities included technical assistance with performance task teaching. During technical assistance sessions, performance task instructional specialists collected feedback concerning the use of performance task instruction then modeled ideal performance task teaching. All participating teachers were required by their school district to attend this staff development. Each teacher received the same training by the same instructional specialist on the same dates. Each participant was asked to use the performance based instructional techniques modeled during staff development from the beginning of the school year.

Class mean ITBS scores were compared before and after treatment. Content analysis of post-treatment evaluation questionnaires was completed. Results were discussed.

12:00 p.m.-12:50 p.m. **GENDER ISSUES**
Session W#022 **(Discussion Session)**.. **Salon E**

PRESIDER: Mildred E. Kersh, University of Southern Mississippi

A UNIVERSITY-WIDE STUDY OF TEACHING STYLES AND GENDER

Candace H. Lacey, Barry University, and
Amany Saleh, Arkansas State University

This study explored the teaching styles of female and male professors. For the purpose of this research, teaching style was defined in terms of a teacher's inclusion, the teachers ability to focus teaching strategies on the characteristics of the class, and sensitivity, the teacher's ability to sense the shared characteristics of learners. The research sought to determine if there was a significant difference in inclusion and sensitivity in teaching style as it related to gender.

The Van Tilburg/Heimlich Teaching Beliefs Scale (1990) and a brief demographic profile were sent, via campus mail, to all full-time faculty members (N=307) in a mid-size southern university. A 35% response rate was received. The surveys were hand scored and the results were analyzed using SPSS. *T* tests were used to determine if there was a significant difference (p=.05) in the variables of inclusion and sensitivity as they related to the gender of the respondents.

The findings indicated that there was a significant difference (p=.05) in the inclusion variable while sensitivity remained relatively similar for female and male professors. Implications for the profession were then developed, and recommendations or practice were offered.

MASTERING THE MAZE THROUGH MENTORING: CAREER ADVANCEMENT OF FEMALE SUPERINTENDENTS

Mary Sue Polleys, Auburn University

This study investigated the career advancement of female superintendents. Although women predominate in the teaching profession, very few superintendents are female. The women who have made it to the top bureaucratic position in public education, the superintendency, have successfully maneuvered through a glass maze of walls as they traveled around unseen barriers that impeded their career progress. This study explored the successful strategies employed by female superintendents for detouring around those glass walls. The purpose of this study was to ask female superintendents to describe the people who assisted them professionally in significant ways, to discuss the obstacles they encountered in their rise to the superintendency, how they negotiated those obstacles, how personal contexts influenced their professional success, the role models who influenced them, and their perceptions of the influence of southern culture on their career aspirations and achievements.

Three superintendents in a southern state were the focus of the study. Public school superintendents with traditionally female names were contacted via e-mail or fax. Of 20 surveys distributed, three completed surveys were returned. These three female superintendents have served as preliminary case study participants.

One major finding was the importance of mentoring in the professional advancement of women. The following glass walls were identified: a shortage of mentors, the need for mentoring from powerful men, sexism, the conflictual nature of ambition, self-limiting behavior, family concerns, gender stereotyping, and highly developed personal characteristics that include risk-taking. Insight from the three subjects was considered in light of literature findings and the author's own career experience. The findings of this study suggested implications for institutions, gatekeepers to the superintendency, professional women in need of mentors, and those in position to mentor.

AFRICAN AMERICAN FEMALE IDENTITY: INVISIBLE AND ENDANGERED

Janeula M. Burt and Glennelle Halpin, Auburn University

The purpose of this study was to determine whether or not a difference existed between the identity development of African American females who attended an historically black institution (HBI) or predominately white institution (PWI). Knowing and understanding who we are and what we are capable of is essential in the development and maturity of all human beings. However, for young African American women developing within the "double burden" (St. Jean & Feagin, 1998) of race and gender can be extremely problematic. African American females must develop an identity that integrates both a healthy sense of blackness as well as a healthy sense of femaleness (Shorter-Gooden & Washington, 1996). Is it more difficult for African American females to achieve a healthy identity within the ascribed context of race and gender on an PWI campus?

Participants in this study were 31 African American undergraduate students at a public, predominately white, land-grant institution located in the southeast region and 76 undergraduate students at a historically black, private institution located in the middle Atlantic states. A survey designed to measure the universal constructs of African American identity was administered. In a t-test for independent samples by gender a significant statistical difference (F (1, 104) = 3.90, $p < .05$) between males and females and between students who attended the PWI and those who attended the HBI (Burt, 1998). African American females who attended the HBI also scored significantly higher (F (1, 75) = 13.77, $p < .01$) than their female counterparts at the PWI. Similarly, African American females scored significantly higher on the identity scale than males at both institutions. Also significant in this study was that nearly 66% of the women sampled were incoming freshman females at the HBI, while the sample of the PWI students was comprised of students who were rising sophomores and juniors.

1:00 p.m.-1:50 p.m. **LEARNING STYLES**
Session W#023 **(Training Session)**..**Salon A**

TRAINER: Linda T. Coats, Mississippi State University

FROM RESEARCH TO PRACTICE: USING STUDENTS' LEARNING PREFERENCES TO ENHANCE TEACHING AND LEARNING

This training session centered on the need for college professors to recognize and accept students' diverse learning preferences. Objectives were to demonstrate how college professors can utilize learning preference research results to enhance teaching and learning and to encourage systematic and reflective practice.

Participants were presented with a review of literature that validated the importance of learning preferences as related to students "learning" classroom material. Participants were then introduced to various instruments used to assess learning preferences. Emphasis was placed on the Productivity Environmental Preference Survey (PEPS) and its use in assessing students' learning preferences. Participants were divided into teaching pairs and given PEPS results from students enrolled in a junior level course at a southern university. Teaching pairs reviewed the results and, with the assistance of the trainer, developed instructional episodes utilizing instructional strategies and techniques that accommodated the learning preferences needs of students. Instructional episodes were presented to the group.

Topics discussed in this training session were: the difference between learning preferences and learning styles, instruments that assess learning preferences, ways to develop lessons to accommodate students' diverse learning preferences, and using scholarship to improve instructional practices. Other topics included reflective thinking and teaching, instructors' learning preferences, and teachers teaching the way they were taught.

1:00 p.m.-1:50 p.m. **PROFESSIONAL DEVELOPMENT**
Session W#024 **(Discussion Session)**.. **Salon B**

PRESIDER: Lynn Howerton, Arkansas State University

COLLABORATIVE PLANNING AND DECISION MAKING: PRELIMINARY CONCLUSIONS FROM AN ONGOING CASE STUDY OF ELEMENTARY SCHOOL TEAM TEACHING

John F. Riley, University of Montevallo

The study examined the collaborative planning and decision making of a grade level team of elementary teachers. The purpose of the case study was to determine the level and nature of interaction among teachers who participated in grade level team planning meetings during the school year.

Eight elementary teachers in a suburban school district in the Mid-South participated in the initial phase of the study in the spring of the school year. Two teachers on this team were new to the district; one of those was a first-year teacher. The others ranged in experience from two to thirteen years. One teacher was African American, the others were Caucasian. All were female.

The researcher observed the teachers during their regular team planning meetings -- 90 minutes Monday afternoons after school, 45 minutes Wednesday mornings during their students' physical education period. The Monday afternoon meetings were primarily devoted to curriculum planning. The Wednesday morning meetings were devoted to team business. The team captain conducted both of these meetings.

The researcher compiled field notes on individual levels of participation and categorized the types of interactions by the teachers. The analysis of these data provided insight into team decisionmaking as practiced in this situation, as well as the relative roles of veteran and novice teachers.

Toward the end of the school year, team members participated in several interviews of prospective new teachers for the team. They discussed these interviews during their meetings, and these discussions provided insight into the team's view of essential qualities for beginning teachers. In addition, these discussions generated comments regarding the perception of the team held by team members and others in the school.

EVALUATION: PROFESSIONAL DEVELOPMENT DESIGNED ON NEEDS ASSESSMENT DATA

Edith Miller, Margaret E. Ross, and Elizabeth Simpson,
Auburn University

As part of a self-study accreditation process, a needs assessment instrument was administered at Sanford Middle School in the Lee County (AL) school system. The instrument was designed to assess perceptions regarding the curriculum, instructional practices, evaluation policies and activities, and community involvement. As a part of a collaborative effort (Professional Development Schools) between Auburn University and the local school, that instrument was discovered to be so complex and vague as to be useless in planning professional development activities.

The graduate professors and students from Auburn University who were working with the local school participants determined that an instrument that was more specific to the instructional methodology suggested by both the general and specific curricular and instructional objectives was needed. Utilizing the objectives (based on local school priorities as well as state and national standards), brainstorming sessions involving university and local school participants resulted in many possible items winnowed to fewer items with evaluation.

A field test of the improved instrument was administered to the faculty and staff and other interested professionals, and the resulting data were useful and definitive in designing appropriate instructional and evaluation professional development. Two major streams of inservice were identified: (1) learner-center teaching methodology and (2) more effective use and scoring of authentic assessment. Also identified were interest in improving traditional evaluation skills and classroom management/discipline.

Further instrument development occurred utilizing the field test results, and a finished instrument was administered at the beginning of the 1999-2000 school year. The results of that administration were used to design professional development activities that could be delivered as a part of the PDS collaboration and the on-going school activity.

AN EVALUATION OF A POST-GRADUATE K-12 PRINCIPALS' LEADERSHIP INSTITUTE

Milly Cowles, The Principals' Academy

The major purposes were to plan an intensive professional development program for 60 principals that incorporated content that dealt specifically with actual leadership and managerial knowledge regarded as essential by 15 carefully chosen, nationally recognized "experts," and to evaluate the effectiveness of the year-long Institute with an objective measure.

In order to examine the two aspects of leadership, one's own perceptions of self and the manner in which "others" viewed the individual's skills and abilities, The ACUMEN was chosen inasmuch as there are two parts of it: (1) a self-profile and (2) a feedback profile. The ACUMEN was taken by each participant before attending the specially planned professional development program. Essentially, the results from 60 principals and 642 co-workers gave information in regard to principals' views of their own leadership skills in 12 significant areas of management and leadership. Then, 10 to 12 co-workers, who were randomly selected from a pool of individuals who were knowledgeable in regard to the actual day-to-day leadership behaviors shown by the principals, took The ACUMEN.

After one year of participation in an intensive leadership development program, the inventory was again taken by the same people. The pre- and post-self and feedback profiles were compared to determine changes, if any, in self and feedback profiles. The results offered strong support for the type of program given.

1:00 p.m.-1:50 p.m. **POLICY**
Session W#025 **(Discussion Session)**.. **Salon C**

PRESIDER: Ira A. Bogotch, University of New Orleans

A COMPARISON AND CONTRAST OF THE DESEGREGATION EXPERIENCES OF THREE LOUISIANA SCHOOL DISTRICTS: LAFAYETTE PARISH, THE CITY OF MONROE, AND OUACHITA PARISH

Stephen J. Caldas, University of Southwestern Louisiana

This study compared and contrasted the desegregation experiences of three medium-sized Louisiana school districts. The study used 30 years of public and nonpublic school enrollment and archival data for the districts of Lafayette Parish, the City of Monroe, and Ouachita Parish. These districts represented an urban/suburban district, an urban district, and a rural/suburban district, respectively. The study tracked changing trends in school district racial compositions. The authors linked active court-ordered desegregation in racially mixed Monroe City to the white flight that took place to the neighboring rural/suburban district of predominantly white Ouachita Parish. It was demonstrated that in racially mixed Lafayette Parish, by contrast, where the integrity of neighborhood school districts was maintained, white flight from the system was much less, and public support for the system remained much greater over the entire period. However, desegregation-inspired school district re-zoning in 1998-99 threatened to erode some public support. It was proposed that school systems strike compromises that tolerate racially identifiable neighborhood schools, if this ensures that the more advantaged social classes do not abandon public schools.

WHAT ARE THE EXISTING DISTANCE POLICIES IN EVALUATION FOR GEORGIA STATEWIDE ACADEMIC AND MEDICAL SYSTEMS USERS?

Barbara K. McKenzie, State University of West Georgia

In 1998, the State University of West Georgia (UWG) and the Georgia Merit System (GMS) were awarded a grant to explore the distance learning policies of various types of organizational settings in the state during the 1998-99 academic year. Prior to the awarding of this grant, no statewide studies had been conducted to examine existing policies at the GSAMS sites. In this study, two major areas of concern were explored: (1) the ways in which distance learning policies had been established, and (2) the types of policies that had been established. Five policy areas were examined: administration and management, technical issues, pedagogy, training, and evaluation.

During summer and fall of 1998, UWG and GMS worked cooperatively conducting focus group interviews, creating the survey instrument, and pilot testing the survey. In November, all GSAMS sites in Georgia (N= 291), with the exception of the telemedicine sites, received two surveys. The site coordinator was instructed to complete one survey and distribute the other survey to an experienced distance learning instructor at the site. The survey consisted of both closed (multiple-choice items) and open-ended questions. A total of 582 questionnaires were sent to the GSAMS sites. One hundred thirty-five completed surveys were returned. Descriptive statistics were calculated on the closed-ended questions using SPSS 8.0. A content analysis was conducted on the open-ended questions.

In the evaluation component of the questionnaire, participants answered questions regarding the individuals and programs evaluated. Questions were asked in order to determine how distance learning coordinators, instructors, and program effectiveness were evaluated. Tables and figures displaying the data generated by this study were developed to show response patterns across organizations surveyed. Conclusions were drawn, and future directions for GSAMS policy development were suggested.

SHOULD ACHIEVEMENT TESTS BE USED TO JUDGE SCHOOL QUALITY?

Scott C. Bauer, University of New Orleans

The emergence of high-stakes accountability has intensified the debate over whether state-mandated assessment is a useful instrument for changing educational practice (Firestone, Mayrowetz, & Fairman, 1998; Ginsberg & Berry, 1998; Sheldon & Biddle, 1998). Nearly all states have set standards for what students should know and be able to do at various points in their schooling, and half the states apply sanctions to those whose students fail to meet the standards (Wolk, 1998, p. 48). While there is evidence that testing changes patterns of teaching, (Firestone et al., 1998), high-stakes testing also produces a high level of stress for teachers and principals and may encourage teachers to consider test scores as ends in themselves (Sheldon & Biddle, 1998).

At last year's annual meeting of MSERA, W. James Popham raised the question: Is it appropriate to use norm-referenced tests to evaluate instructional quality? He then invited researchers to participate in a study to address the question: Should student scores on standardized achievement tests be used to evaluate instructional quality in local schools? This paper was one among many local efforts to obtain data to address this important question.

The investigation used the research protocol designed by Popham and local study directors to determine if participants felt that test questions appropriately measure school quality, or if they suffered from what Popham (1999) termed confounded causality, i.e., the questions measure factors that are beyond the reasonable control of the school. Approximately 40 reviewers, half of whom were teachers and half were parents of elementary school children, participated in the study. They rated test items from the third-grade edition of a nationally published norm-referenced test. Results of the rating process were presented, along with data from debriefing sessions dealing with the efficacy of the item rating process itself.

1:00 p.m.-1:50 p.m. **LANGUAGE**
Session W#026 (Discussion Session)..**Salon D**

PRESIDER: Randall Parker, Louisiana Technological University

TWENTIETH-CENTURY HISTORICAL PRESERVATION OF ANTEBELLUM PLANTATION LIFE: A CONTEXTUAL MECHANISM FOR TWENTY-FIRST CENTURY ADVANCED LITERATE BEHAVIORS IN AFRICAN AMERICAN CHILDREN

Elizabeth E. LaVergne-Pinkett, University of Southwestern Louisiana

The central position of this paper was that late twentieth-century preservation of ante-bellum southern United States plantation life is a mechanism for twenty-first century advanced literate behaviors, with a particular focus on the Great River Road plantations of southeastern Louisiana. Because part of the history of African American children is contained therein, the preservation provides a context to argue the imperative that African American children acquire Standard American English, the language of power. Essential to the argument is the notion that advanced literacy enables one to record both his own and his ancestors' history, thereby reducing the probability of misrepresentation, misinterpretation, and mistranslation of the message. Furthermore, in order to record from the slave's perspective, the African American child is required to transport himself mentally and emotionally to the time of slavery and be able to write the slave's story in the dominant language of his (the child's) time. Accordingly, the language of power positions him to preserve his history without depending on the detached writer's so called "objective view," which is frequently tempered by communicentric bias.

Toward this end, the position was organized around the following key points: (1) description of historical and contemporary River Road plantation society in Louisiana, (2) conceptualization of language literacy according to its knowledge construction and definition, (3) presentation of other historical contexts that depict the argument's imperative, (4) reasons to compel young African Americans to visit the plantations, (5) the effect of the language of power on preserving one's history, and (6) conceptual framework to illustrate the main argument and to promote future research on the acquisition and mastery of advanced literate behaviors by African American children. In the final part of the paper, teaching implications were presented based on the central argument.

THE ROLE OF EXPECTATIONS IN FOREIGN LANGUAGE LEARNING

Christine E. Daley, Muscogee County (GA) Schools; Anthony J. Onwuegbuzie,
Valdosta State University; and Phillip Bailey,
University of Central Arkansas

Research has shown that students' expectations of their performance in a foreign language course is an important predictor of their future achievement. Thus, the accuracy of students' expectations may be a key factor in determining foreign language performance. Two types of biases have been found to occur in foreign language learning. The first bias, self-enhancement, pertains to students who are unrealistically optimistic about their ability to learn a foreign language. The second bias, self-derogation, pertains to students who have little or no confidence in their performance in foreign language classes. The purpose of this study was to investigate the prevalence of these two biases and to compare students with these two biases, as well as those with accurate self-perceptions of their foreign language performance, with respect to anxiety and overall academic achievement. Participants were 213 college students from a variety of disciplinary backgrounds, enrolled in Spanish, French, or German classes. Participants were administered the Foreign Language Classroom Anxiety Scale. This scale contains 33 Likert-type items that assess students' levels of anxiety during language classes.

Findings revealed that self-enhancement bias (47.4%) was more than three times as prevalent as was self-derogation bias (13.6%). Students with self-derogation bias tended to have statistically significantly higher levels of foreign language anxiety (*M* = 108.33, SD = 21.81) than did self-enhancers (M = 95.47, *SD* = 22.98) and accurate self-appraisers (*M* = 94.77, *SD* = 22.51). The effect sizes associated with these differences were large (i.e., 0.57 and .61, respectively). Additionally, self-enhancers (*M* = 2.83, *SD* = 0.59) had significantly lower levels of overall academic achievement (i.e., gpa) than did self-derogators (*M* = 3.14, SD = 0.60) and accurate self-appraisers (*M* = 3.28, SD = 0.50). Again, the effect sizes were large (i.e., .53 and .85, respectively). These findings suggested that the two expectation biases that occur in foreign language classes may have different antecedents.

THE VALIDATION OF THREE SCALES MEASURING ANXIETY AT DIFFERENT STAGES OF THE FOREIGN LANGUAGE LEARNING PROCESS: THE INPUT ANXIETY SCALE, THE PROCESSING ANXIETY SCALE, AND THE OUTPUT ANXIETY SCALE

Phillip Bailey, University of Central Arkansas; Anthony J. Onwuegbuzie, Valdosta State University; and Christine E. Daley, Muscogee County (GA) Schools

MacIntyre and Gardner (1994a) developed the Input Anxiety Scale (IAS), the Processing Anxiety Scale (PAS), and the Output Anxiety Scale (OAS) to measure anxiety at the input, processing, and output stages of the foreign language learning process. The IAS measures the apprehension experienced when receiving information in the second language; the PAS assesses the anxiety experienced when learning and thinking in the foreign language; and the OAS measures the apprehension experienced when speaking or writing in the foreign language. Apart from MacIntyre and Gardner (1994a), no other study has examined the psychometric properties of these instruments. This was the purpose of the present study.

Two hundred fifty-eight university students were administered the IAS, the PAS, and the OAS. Evidence of construct-related validity was provided via factor analysis, which revealed one specific factor for each scale, explaining 43.3%, 44.0%, and 44.7% of the variance in IAS, PAS, and OAS scores. Evidence of criterion-related validity was established via significant correlations between scores on each scale and a measure of global foreign language anxiety. A hierarchical regression analysis revealed that the IAS explained the majority (40.8%) of the variance in global foreign language anxiety.

The PAS and the OAS explained an additional 23.6% and 4.9% of the variance, respectively. A confirmatory factor analysis revealed that the three scales did not represent either (1) a single unidimensional scale underlying foreign language anxiety or (2) a three-factor model of anxiety. These findings combined provided evidence that, individually, the IAS, PAS, and OAS each yielded reliable and valid scores that were somewhat intercorrelated. However, the extent to which these scales, in their present form, adequately measured and reflected the three-stage conceptualization is in question--justifying further research in this area.

2:00 p.m.-2:50 p.m. **FIELD EXPERIENCE**
Session W#027 **(Discussion Session)**.. **Salon A**

PRESIDER: Cynthia Harper, Jacksonville State University

HOW DOES STANDARDIZED TESTING IMPACT THE STUDENT TEACHING EXPERIENCE?

Lauren Rabb Wells and Linda Jones,
Mississippi State University

Standardized testing is increasingly being used in school districts across the United States for the purpose of school accountability. In Mississippi, standardized test scores have become a primary factor in school district accreditation ratings. Test results for each school in the state are published yearly in The Mississippi Report Card. This comparison has increased the pressure on schools to improve test scores. The purpose of this study was to determine the effects of standardized testing on classroom instruction and student teaching.

In order to examine the effect standardized testing has on the student teaching experience, supervising teachers in 35 elementary, middle, and junior high schools in northeast Mississippi were surveyed with an open-ended questionnaire developed by the researchers and tested for content and construct validity. The questions focused on teachers' perceptions of how standardized testing affected classroom instruction and student teaching. Student teachers majoring in elementary education were given the surveys during a seminar and asked to distribute them to their supervising teachers. A cover letter explaining that participation was voluntary and responses would be kept anonymous was attached to each survey. Supervising teachers were instructed to place the completed questionnaires in sealed envelopes, and student teachers returned the envelopes to the researchers during the following seminar.

Forty-five of the surveys were returned. Thirty-six teachers indicated that they were directly involved in administering the norm-referenced, standardized Iowa Test of Basic Skills. Nine kindergarten and first-grade teachers said that they were not involved in testing their students until the spring. The responses were categorized as positive, negative, and neutral toward standardized testing. Overall, 97% of the respondents stated that they felt standardized testing negatively impacted classroom instruction and student teaching. Supervising teachers' comments were included in the summary.

EXPLORING THE HORIZONS OF PRESERVICE INTERNSHIPS

Emily A. Melvin, Pamela Boyd, Virginia Roy, and Kim Hardiman, Auburn University

The preservice internship experience is the cornerstone of the teacher preparation program in every college of education. Each preservice intern has individual skills, abilities and professional goals--Can one type of internship experience meet the needs of all preservice interns? Auburn's College of Education does not think so.

In an attempt to meet various and individual needs of preservice students, Auburn University offers internship opportunities in addition to the "traditional" experience. In addition to the "traditional" opportunity, Auburn University offers internships through the Disney-connected Celebration School in Orlando, Florida, and through the Consortium of Overseas Student Teaching (C.O.S.T.) program.

The purpose of this study was to examine each of the three internship categories provided at Auburn and to investigate the attitudes of a sample of student teachers who had been involved in each type of setting. Questionnaire responses and individual case studies provided data for this investigation.

Data demonstrating the responses of interns involved in each internship category provided information for guiding teacher education programs in the quest for improved and varied preservice internship experiences and opportunities.

THE PROFESSIONAL DEVELOPMENT SCHOOL EXPERIENCE EVALUATION

Cynthia M. Gettys, Kathleen Puckett, Barbara M. Ray, Valerie C. Rutledge
and Jeanette Stepanske, The University of Tennessee, Chattanooga

This study investigated perceptions toward the Professional Development School Experience (PDS), an early field placement in the Teacher Education Program, at a southern metropolitan university. The purpose of the study was to compare the attitudes of the four groups involved with the PDS experience: the PDS preservice students, the PDS site-based classroom teachers, the PDS site-based university faculty, and the PDS site-based administrators. Perceptions were analyzed in the following areas: Curriculum and Planning for Teaching, Roles of the Program Participants, University-PDS Relationships, and Program Perceptions.

A color-coded, 30-item questionnaire was completed by 250 PDS students, 5 PDS site-based administrators, 8 PDS site-based university professors, and 63 site-based classroom teachers. Additional qualitative data were gathered through open-ended questionnaires, interviews, and summary reflection papers written by the university PDS students.

Data analysis involved the application of descriptive statistics, the use of the correlated *T*-test, and ANOVA. Preliminary findings indicated very strong support by all four groups for the PDS experience. Differences approaching statistical significance were found between the perceptions of the PDS preservice students and the PDS site-based university professors regarding the university professors' relationships and involvement with the PDS site experience.

2:00 p.m.-2:50 p.m. **SCHOOL IMPROVEMENT**
Session W#028 **(Discussion Session)**.. **Salon B**

PRESIDER: Dennis Zuelke, Jacksonville State University

THE ACTUAL PROCESS TO GET SMALL CLASSES VS. THE MACRO VIEW

Paula Egelson, SERVE Education Laboratory; C. M. Achilles,
Eastern Michigan University; and Jeremy D. Finn,
State University of New York at Buffalo

Some class-size reduction (CSR) critics have called CSR among the most expensive of school-improvement efforts. Large-scale studies, such as AIR and RAND's The Costs of Enrollment Increases and Class-Size Reduction (Draft: 3/99) have "modeled" the interactions of CSR and enrollments, and estimated that CSR in grades K-3 will increase education costs between five and six billion per year for each year of reduction, about the amount of annual Title I budget. This is a "macro" view.

Counter to this "doom and gloom" estimate are achievements of CSR to about 20:1 in K-3 in relatively poor states such as Texas (House Bill 72 in 1985) and Tennessee. Some low-wealth sites have achieved class sizes of 13:1-18:1 at relatively modest costs (e.g., Burke County, NC). Major obstacles were identified as (1) space, (2) personnel, and (3) "trade-offs."

This study reported on five local-district examples of achieving CSR to about 15:1 or 18:1, describing how local administrators interpreted and applied the research findings of CSR in specific schools. Five schools from three states were compared on context variables (size, percentage on free lunch, grades, etc.), and on "before and after" class sizes in grades K-5. Researchers interviewed administrators and faculty, reviewed records, and observed in the schools to obtain the data. Results showed that a variety of alternatives were used to get the small classes (e.g., combining grades, reassigning special teachers, reallocating resources). Achievement levels at all sites improved, in line with expectations derived from early experimental evidence.

Based upon the five examples and findings of other studies, actual and projected costs, benefits, and "trade-offs" were used as a basis for "real-life" suggestions of ways to achieve small classes in primary grades at minimum costs.

A STATE-LEVEL INITIATIVE FOR TEACHERS BASED ON "BEST PRACTICES" THAT INCORPORATE TECHNOLOGY: A STORY OF SUCCESS

Robert L. Clowers and Larry R. Dickerson,
University of Arkansas at Little Rock

The study evaluated the Arkansas Leadership Academy's Teacher Institute (systemic) training program that introduced "best practices" as identified in the research literature that provided teachers with an integrated curriculum structure that included technology.

A survey instrument was used to collect data from participants of four extended training sessions, collectively termed a "Forum." Each Forum takes one year to complete. The surveys were mailed in early summer 1998 to cohorts of four recent Forums; 115 of 128 teachers responded to the survey. The instrument had five sections that paralleled the programs' objectives. Response items were based on best practices and program objectives. The instrument was pilot tested.

Descriptive statistics and the nonparametric "Sign Test" were used to note changes and determine if teachers' "prior to" and "after" Forum responses were significantly different. ANOVA and qualitative methods were also used.

Approximately one-half of the teachers had a master's degree or higher. Almost 10% of the participants were male, and just over 9% were African American. Some 70% of the teachers represented elementary or middle schools, and 29% represented junior or senior high schools.

The Forums had a significant, positive, and sustained impact on teacher activities, behaviors, professional development, and the use of and access to technology. In many instances, teachers began to practice what they were learning during the course of their sessions rather than waiting until all sessions were completed. Gains continued in many areas after teachers "graduated" from their Forums.

This successful program may serve as a model to provide teachers with new instructional techniques that parallel a state's systemic change efforts. Such programs, however, need to be well thought out and have support from a variety of educational constituents. Positive impact was seen in classrooms, schools, and communities and may be expected to permeate statewide if supported at the state level.

THE LESSON PLAN - ANOTHER DINOSAUR READY FOR EXTINCTION?

Fran E. Holman, Debbie Hamilton, Debbie Thomas,
and David Gullatt, Louisiana Tech University

From Herbart to Hunter, lesson planning has been explicated and espoused. Yet, there is a growing exclamation that the revered lesson plan is antiquated. Is the lesson plan, like dinosaurs, soon to be extinct? That was the research question.

This first tier of this project focused on the stakeholders most responsible for lesson planning: classroom teachers and principals. These stakeholders were surveyed to determine their level of involvement in writing lesson plans and/or evaluating lesson plans. The second tier of this project centered on university faculty who teach in a college of education and are, thus, responsible for teaching lesson planning to preservice teachers. The final tier of this research considered the assessments of lesson plans made by preservice teachers--those precariously poised between veteran teachers who KNOW and university professors who INSTRUCT.

At a distant glance, it would seem that there should be no disparity among teachers, principals, university professors, and preservice teachers about lesson planning. It is tacitly assumed that all share or enthusiastically support the same goals for schools. The results, though, suggested that, while all shared Shapiro's idea that "the purpose of schools should be learning," the path to that purposefulness was not singular.

2:00 p.m.-2:50 p.m. **DISTANCE EDUCATION**
Session W#029 **(Discussion Session)**.. **Salon C**

PRESIDER: Ginny Lane, University of North Texas

ISSUES IN THE USE OF VIDEO CONFERENCING FOR DISTANCE EDUCATION

Vahid Motamedi, Mississippi State University

Distance education is described as instructional delivery that takes place when learners and teachers are separated throughout the learning process by time and physical distance. Research indicates that distance education provides students with opportunities for learning through alternatives to regular class meetings. Furthermore, researchers report that distance education allows access to education for those who are unable to attend an educational establishment.

The paper began with a description of distance education, including an historical overview. The paper then presented five major issues concerning the use of video conferencing in distance education that have been identified in the research literature: (1) cost, (2) discipline, (3) instructional effectiveness, (4) scheduling, and (5) technological literacy. This was followed by a description of how distance education programs have effectively addressed each issue.

Solutions to some of these issues are emerging. After a careful consideration of each issue, guidelines were provided to help educators effectively deal with these potential obstacles. Those interested in the design, delivery, or evaluation of distance education particularly teachers and educational administrators found this presentation useful for learning about this increasingly popular educational approach for the twenty-first century.

INTERACTION AT A DISTANCE

Jo-Anne E. Schick and Elizabeth Kirby, State University of West Georgia,
and Anthony J. Guarino, Auburn University

An initial study emphasized the importance of creating a distance learning environment in which all students could interact effectively with the instructor and their classmates so as to examine and articulate their ideas and beliefs. In this particular study, researchers examined the nature of interaction between the instructor and students and among students at a selécted distance site on three separate occasions. Researchers were particularly interested in any effect that the presence or absence of the instructor might have had on the structure of student discourse and the construction of knowledge in the distance classroom.

Researchers conducted a naturalistic, qualitative study of a course taught via GSAMS (Georgia Statewide Academic and Medical System). Researchers observed all classes at the host site, and field notes recorded interactions between the instructor and students at all sites. In addition, a researcher at the distant site transcribed interactions between the instructor and students and among students.

Researchers were especially interested in differences in student-teacher interactions when the instructor was on-site vs. off-site. The three classes examined allowed researchers to determine changes in these interactions patterns. Preliminary results indicated that the pattern of student-teacher interactions varied markedly at the site when the instructor was present. In the absence of the instructor, students interacted less frequently with the instructor and were more reluctant to articulate their ideas and responses to the class as a whole. Students seemed much more willing to interact with the instructor and with classmates at other sites when the instructor was present.

This study underlined the importance of creating a distance education environment in which all students could interact effectively with the instructor and their classmates so as to examine and articulate their ideas and beliefs. In this way, students would be truly be "learning" in the constructivist sense.

WHY DO STUDENTS CHOOSE DISTANCE LEARNING? A COMPARISON OF CHOICE FACTORS OF PARTICIPANTS IN INTERNET AND INTERACTIVE VIDEO DISTANCE LEARNING COURSES

Margaret D. Roblyer, State University of West Georgia,
and Anthony J. Guarino, Auburn University

The authors' past findings have indicated that, although all students seemed to value interaction with instructor and other students, the need for interaction seems significantly more important to students choosing face-to-face formats, while other factors (e. g., control over learning pace and when to do course activities) are more important to those choosing distance learning (DL) formats. The current study surveyed 31 graduate students in university courses meeting via interactive video, and compared these responses with those of 43 community college and high school students in primarily Internet-based courses. It was hypothesized that students in interactive video courses would rate logistics/convenience factors as more important than other factors, and that ratings of students choosing Internet-based DL courses would differ significantly from ratings of students in interactive video courses.

Students in interactive video courses were participants in a master's or specialist degree program in media or instructional technology, taking courses required for their programs. All were adults (35-50 years old) who worked fulltime and were taking the distance course after the regular work day. Some of the community college students taking an earth science course were enrolled in their program on a part-time basis and some full-time. Their ages ranged from teenagers to older adults. High school students ranging from sophomore to senior levels were enrolled in chemistry, algebra, and American government courses offered by a "virtual high school."

The results confirmed the hypotheses, finding that students choosing interactive video courses rated factors related to logistics/convenience, specifically, distance from the course site, as more important than other factors; and that students choosing Internet courses differed significantly from students in interactive video courses, who rated need for control as most important. These results have significant implications for helping organizations structure their DL offerings in ways that meet student needs and help ensure student satisfaction.

2:00 p.m.-2:50 p.m. **QUALITATIVE RESEARCH METHODS**
Session W#030 **(Training Session)..Salon D**

TRAINER: Kathy K. Franklin, University of Arkansas at Little Rock

THE SEARCH FOR A NEEDLE-IN-A-HAYSTACK, PART II: THE ART OF CODING

Because meaning in naturalistic inquiry is embedded in the words, symbols, or actions of the research participants, learning to hear and observe the data is a most important first step in interpretive research (Rubin & Rubin, 1995). Closely related to that important first step is the often mystifying act of coding (Merriam, 1998). Quality coding is the foundation of reliable qualitative data analysis (Miles & Huberman, 1994). Unfortunately, because of the ambiguous nature of the coding process, many neophyte researchers struggle in constructing that qualitative foundation.

The purpose of this one-hour training session was to share the experiences of the session facilitator with both "hearing" and "coding" naturalistic data. At the 1998 MSERA annual meeting, the facilitator presided over a two-hour training session in which participants collaboratively analyzed a focus group transcript from coding through developing a theoretical framework. This training session was intended to serve as a sequel to the 1998 training session in providing participants with an indepth study into one component in that process.

The learning objectives for this training session included: (1) understanding the techniques employed by qualitative researchers to ensure valid "listening" of the data, (2) applying those techniques in reading transcripts produced from extant research, (3) understanding coding techniques, and (4) analyzing extant transcripts using the coding process. To accomplish these four learning objectives, participants were guided through a three-phase training session. In the first phase, the facilitator shared data listening and coding techniques from the literature on naturalistic inquiry. Second, participants worked with a partner to manually code transcripts produced from personal interviews and focus group sessions. Finally, the facilitator demonstrated a computer-generated coding process. Each participant received a workbook to guide future qualitative coding.

2:00 p.m.-2:50 p.m. **STATISTICS, RESEARCH METHODS, AND SELF-PERCEPTION**
Session W#031 **(Discussion Session)**.. Salon E

PRESIDER: Edward B. Reeves, Morehead State University

REDUCING STATISTICS ANXIETY: A RANKING OF SIXTEEN SPECIFIC STRATEGIES

Vicki A. Wilson, Wilmington College

As part of an ongoing study of statistics anxiety, 37 students in the Master of Education program in a small, private liberal arts college completed a Likert-scale instrument asking them to rate from 1 ("Not at all") to 5 ("A Great Deal") the extent to which 16 specific strategies reduced their statistics anxiety in the educational research classroom. Items were compiled from the literature on statistics anxiety and from the answers of students in previous research conducted by the author.

Means and standard deviations were computed for each item. Ranking at the top for reducing anxiety was allowing tests to be "open book/open note," followed by working with a partner in the computer lab. The next five items were focused on instructor behavior and characteristics: positive attitude, encouragement, reassurance that "We can do it!," recognition of anxiety, and use of humor. The use of rubrics, guidelines for completing and evaluating written and oral projects, ranked in the top half of items indicated by students as reducing their anxiety. Lowest in the rankings were doing work that was "real world" oriented, support of peers outside class, and ability to get an "A" in the course.

Working with a group in class and outside of class on a research project ranked just below the middle of the items but showed more variability than the other items; as supported in the literature, cooperative learning can be both anxiety reducing and anxiety producing, depending on the composition of the group.

INTRINSIC AND EXTRINSIC RELIGIOSITY: A META-ANALYTIC REVIEW OF RELIGIOSITY RESEARCH SINCE 1983

Darrell R. Boles and Jwa K. Kim, Middle Tennessee State University

The purpose of this project was to use the methods of meta-analysis in order to uncover trends and developments of intrinsic and extrinsic religiosity of published research articles from 1983 to 1998. Since 1967 the Religious Orientation Scale (ROS) by Allport & Ross has been frequently used to measure intrinsic and extrinsic concepts of religiosity. Subsequently, the ROS has undergone two meta-analytic studies: one focused on social desirability from 1974 to 1994, and the other focused on all research prior to 1982. Intrinsic and extrinsic religiosity have subsequently encountered a number of methodological developments and conceptual discussions in published research.

Articles were collected through searches on both PsycLit and ERIC, in addition to the ancestry method. Meta-analysis revealed that the ROS has been utilized in 43 empirical studies published between 1983 and 1998. The ROS was also used more frequently than all other scales that measure intrinsic and extrinsic religiosity. The analysis also showed no real difference in the publication trend between the studies using the ROS or the Non-ROS scales to measure intrinsic and extrinsic religiosity. Thirty-one intrinsic-extrinsic correlations were used to determine an effect size correlation of $r = -0.26$. The variables most commonly correlated with the ROS were depression, self-esteem, and social desirability. Recommendations for future research in the area of intrinsic and extrinsic religiosity included the continued use of the ROS and the continued examination of the latest developing scales and the value they have to add to the already existing scales.

THE RELATIONSHIP BETWEEN SELF-PERCEPTIONS AND STATISTICS ANXIETY

Christine E. Daley, Muscogee County (GA) Schools, and Anthony J. Onwuegbuzie,
Valdosta State University

Statistics anxiety, which is prevalent among graduate students, has been conceptualized as comprising several dimensions, including worth of statistics, interpretation anxiety, test and class anxiety, computational self-concept, fear of asking for help, and fear of the statistics instructor. Since students with high levels of statistics anxiety tend to perceive that other students have greater statistical proficiency than they do, and that their ineptness is a source of embarrassment, it is likely that self-perception is an antecedent of statistics anxiety. Thus, the purpose of this study was to investigate the relationship between seven dimensions of self-perception and six dimensions of statistics anxiety, using a canonical correlation analysis.

Participants were 146 students enrolled in graduate-level research methodology courses. The first canonical function ($Rc12 = 32.8\%$) revealed that students with the lowest levels of perceived scholastic competence, perceived intellectual ability, and perceived creativity tended to have the highest levels of statistics anxiety associated with worth of statistics, interpretation anxiety, test and class anxiety, computational self-concept, fear of asking for help, and fear of the statistics instructor. A comparison of the standardized and structure coefficients suggested that perceived self-worth served as a suppressor variable. The implications of the findings were discussed.

2:00 p.m.-2:50 p.m. **EXCEPTIONAL EDUCATION**
Session W#032 **(Discussion Session)**.. **Salon F**

PRESIDER: Qaisar Sultana, Eastern Kentucky University

QUANTITATIVE ANALYSES OF A STUDY INVESTIGATING THREE SPELLING INTERVENTIONS AND STUDENTS WITH LEARNING DISABILITIES RECALL

Johan W. van der Jagt, University of West Alabama

This study investigated three spelling interventions to increase the spelling

accuracy of students with learning disabilities. The primary purpose of the study was to determine the effectiveness of three spelling interventions on students, with learning disabilities short- and long-term spelling accuracy of high-frequency words written in isolation and in context. The two secondary purposes were to investigate the relationships of factors (e.g., auditory word discrimination ability, and vowel precision) among students with LD, and interactions among selected variables (e.g., level of auditory word discrimination) and type of spelling intervention.

Thirty six randomly selected third-, fourth-, and fifth-grade students with LD were assigned to three interventions. The interventions consisted of a groups learning how to spell high-frequency words utilizing: a traditional spelling procedure, a multisensory without perceptual-vowel enhancement procedure where vowels were similar in intensity as consonants, and a multisensory with perceptual-vowel enhancement procedure where vowels were written in black marker to heighten their intensity. The pre-posttest experimental design posttested the students with LD's short-term spelling accuracy for words in isolation and in context directly following the completion of each intervention, and long-term spelling accuracy 19 days following each intervention.

A qualitative aspect of the study consisted of the development of a spelling error analysis system to determine types of spelling errors. Quantitatively, ANCOVA's were calculated for primary type vowel error (omissions, additions, or substitutions) and vowel precision. No significant interactions among level of vowel precision with type of intervention were found. Significant differences for vowel omission scores by group and across grade levels were found. The findings suggested different emphases in the teaching of spelling.

ADMINISTRATION OF SPECIAL EDUCATION: A LITERATURE REVIEW

Vicki Prouse Carter, Harrison County (MS) Schools, and Alex Carter,
Mississippi Gulf Coast Community College--Jackson County

Educational administrators, especially administrators of schools or programs for students with disabilities, must analyze the basic philosophies of school administration and management to determine their effectiveness when applied to this setting. Administrators within the area of special education must consider the dignity of each individual student and create an educational environment that meets the multiple needs of special population students. This situation is also true for those administrators working with large inclusion populations in a regular school setting. Therefore, the objective of this research was to determine what administrative characteristics/qualities and/or management styles were needed to be an effective administrator/leader of a special populations program or school.

The literature review included references from educational journals, ERIC documents, books, and electronic sources. The questions to be answered by this literature review included: (1) What administrative characteristics and/or qualities are needed to be an effective administrator in a special education program or school? (2) Are different management styles required for special education administrators? (3) What administrative strategies are needed to be effective in a special education setting? and (4) What are the implications for the training of educational administrators for special education settings as identified by this research?

The results of this literature review indicated several interesting concepts related to the administration of special education settings. To be an effective special education administrator, individuals should have extensive experience in various special education settings and levels. General administrative strategies and management styles must be adapted, preferably within the training process, to ensure a greater chance of success in administering special education.

PREPARING PRESERVICE TEACHERS FOR INCLUSION

Beth H. Counce and Anne Hamilton, University of Montevallo

With the passage of the Individuals with Disabilities Act (IDEA) in 1990, and the reauthorization in 1997, students with special needs are more frequently being placed in regular classrooms, and student interns are more frequently being placed in inclusive classrooms for their internship. As our institution considers the option of offering Elementary Education majors dual certification, certification in regular education and certification in mild learning handicaps, this study was concerned with the perceived level of preparation of the student interns who had little training in working with students with special needs and who were currently placed in inclusive settings.

A survey related to experiences students had in working with students with special needs during their internship was administered to 57 student interns at the completion of their internship. Thirty-three participants were Elementary/ Early Childhood majors, and 24 participants were secondary education majors. All students indicated that they worked with students with special needs, with the majority of interns being placed in inclusive classrooms. Phone calls were made to interns to obtain additional information about their experiences, and calls were made to cooperating teachers to obtain information from their perspectives.

Analysis of the surveys indicated that the majority of the students felt prepared to work with students with special needs. While many students felt prepared to work with students with special needs, they indicated that they had assistance from the cooperating teacher or the special education teacher. Responses to open-ended questions related to students indicating their specific needs and identifying any program needs to help better prepare them for working in inclusive settings were mixed. The most common response was the need for more actual experience in classes that included students with special needs. The results of this study were to be considered for future course and program changes.

3:00 p.m.-3:50 p.m. **TECHNOLOGY AND HIGHER EDUCATION**
Session W#033 **(Discussion Session)**.. **Salon A**

PRESIDER: Gunapala Edirisooriya, East Tennessee State University

FACULTY ATTITUDES ABOUT THE USE OF TECHNOLOGY IN THE COLLEGE CLASSROOM

Steve Marvin, Kathy K. Franklin, Rob Edleston, Tricia Satkowski-Harper, Christy Oberste, and I. J. Routen, University of Arkansas at Little Rock

There is no doubt that the technology explosion has influenced college education. However, many educational technologists agree that the explosion has failed, as was first predicted, to transform college education (Schofield, 1995). It has been suggested that one culprit of this failed transformation may be the lukewarm reception by college faculty to instructional technology. A study by the University of Southern California revealed that only 53% of college and university faculty used computers to aid in the educational process (DeSieno, 1995). While that study may be dated, in a recent article, Lehman (1998) identified several reasons why college faculties, still, are not warming to the use of technology.

The purpose of this study was to explore faculty attitudes about the use of technology in the metropolitan university classroom. Researchers conducted four "electronic" focus group sessions with faculty at a metropolitan university via networked computers housed in a decision-support center on campus. The focus group sessions, homogeneous based on professorate rank, included a total of 29 participating faculty. A three-step content analysis procedure was used to analyze the qualitative data. First, the transcripts were manually coded and audited by a team of eight researchers. Second, a team of four researchers reduced the codes into attitude themes and patterns with a third research team, subsequently, developing the theoretical framework.

The resulting theoretical framework included six constructs explaining faculty attitudes about technology in the college classroom. Those constructs included, the influence of technology on (1) student success, (2) student interaction, (3) college pedagogy, (4) access to information, (5) the college classroom, and (6) the traditional methods of instruction. Furthermore, the framework addressed faculty attitudes concerning the influence of three educational issues on technology: (1) teacher control of the classroom, (2) nuances of the ideal classroom, and (3) theories of student learning.

REVIEW OF THE LITERATURE CONCERNING INSTRUCTIONAL TECHNOLOGY STRATEGIC PLANS AT CARNEGIE I UNIVERSITIES

J. Patrick Brennan II, The University of Southern Mississippi;
Daniel W. Surry, University of South Alabama; and
Marshall G. Jones, The University of Memphis

This presentation described a review that examined the professional literature concerning instructional technology strategic plans at Carnegie I universities. Instructional technology strategic plans; are used by universities to guide the process of infusing technology into the classroom. The purpose of this review was to identify professional literature associated with IT strategic plans, also, to determine what the literature says should be included in those plans. The review sought information concerning the present number of plans in place at Carnegie I institutions, the degree to which the plans have been implemented, common elements of the plans, and any information about the success or failure of the plans.

This literature review is part of an on-going investigation into the adoption, implementation, and utilization of instructional technology in higher education. The literature is important because it serves as a basis for the next phase of the study in which IT strategic plans at all Carnegie I institutions will be collected and analyzed. The overall study is important because it will provide a framework for the development of IT strategic plans at other institutions. The study also described the process by which successful strategic plans were developed.

The results of the review were presented in a draft report based on the available literature. The presenters provided all session attendees with paper copies of the draft report as well as copies of the PowerPoint slides used in the presentation. Finally, the presenters provided attendees with the URL of a WWW site they were creating to disseminate this information.

3:00 p.m.-3:50 p.m **Session W#034**	**EDUCATIONAL REFORM AND ENGLISH EDUCATION** **(Discussion Session)**.. **Salon B**
PRESIDER:	Linda W. Morse, Mississippi State University

LITERACY AND EFFECTIVE TEACHING IN DIVERSE CLASSROOMS

Dana Lynn Key, The University of Alabama, and
Cassandra Harrington, Athens (AL) High School

This study described the perceptions of four English language arts teachers concerning: (1) their effectiveness in teaching diverse literacies, (2) opportunities for practicing effective strategies and pedagogical skills, (3) opportunities for improving teaching and learning, and (4) opportunities and needs for professional development. The study was designed by the researcher to direct those teachers in action research in their classrooms.

The teachers were participants in a phenomenological qualitative study to determine and explore ways in which English educators could most effectively plan and implement their teaching to best serve the multiliteracies of the diverse student populations in today's schools. The researcher collected data from January through April from focus groups, interviews that were taped and transcribed, and document analysis. There were checks for triangulation of the data, peer debriefing, and member checks of the transcribed interviews to assure validity and reliability. The researcher was a participant observer on many occasions and made field notes of those visits to the school.

As the twentieth century comes to a close, teachers and teacher educators are searching for ways to better address and serve the students in diverse classrooms. Standards for learning and recent calls for reform in education have recommended that teachers reevaluate how they teach, how students learn, what literacies should be taught, and when teachers should teach those literacies. Many researchers have cited that laboratory based research improved classroom practice, but that action research or "reflective practice" by classroom teachers was extremely beneficial to improve teaching.

While this study did not have implications for every College of Education, intern, or classroom teacher, it revealed insight into teaching the multiliteracies of the diverse classroom of students in today's schools.

EVALUATION OF EDUCATIONAL TECHNOLOGY IN TEN KENTUCKY MIDDLE SCHOOLS

Barbara A. Kacer and James R. Craig, Western Kentucky University

The Kentucky Educational Reform Act (KERA) of 1990 is a massive education reform bill that specified many initiatives to improve public schools in Kentucky. The Concerns Based Adoption Model (CBAM) of education innovation implementation was the theoretical basis for a three-year, longitudinal evaluation study that focused in part on the implementation of educational technology.

A sample of 10 Kentucky middle schools was chosen to represent eight geographic regions of the state and five categories of student achievement: improving scores when baseline was in the upper, middle, or lower quartile, and no improvement in scores when baseline was in the upper or lower quartile.

One of three diagnostic CBAM assessment tools is the Innovation Configuration Component Map, which specifies key component features of an innovation and level of use from "ideal" to "no use." The Educational Technology Innovation Configuration Component Map (ETICC Map) was developed and field tested by teams of educators who systematically identified and evaluated relevant components and component variations using established procedures.

The ETICC Maps were completed by interviewing the Coordinator of Educational Technology in each school. Selected map characteristics were verified via direct observation of classrooms, libraries, and computer laboratory facilities. In addition, 15-minute interviews were conducted with more than 200 teachers regarding their educational practices.

The ETICC Map data reported provided a profile of educational technology use as related to overall student achievement in selected Kentucky middle schools. Based on the use of the ETICC Map, teacher interviews and school observations, a streamlined ETICC Map had been created and its use was discussed.

APPROACHES IN CREATING SIMILAR SCHOOL/DISTRICT COMPARISON GROUPS AND REPORTING COMPARATIVE FINDINGS

Xiujuan (Susan) Yuan, Susan Kochan-Teddlie, and Bobby Franklin,
Louisiana State Department of Education

As of 1997, 46 of the 50 United States had either already implemented or were in the process of designing performance-based education accountability systems. Most state accountability systems currently compare student performance to state standards without considering intervening variables such as student demographic characteristics. Though some researchers have recommended the use of both absolute and relative performance indicators, it remains controversial whether comparative performance statistics for schools with similar student demographic or school organizational characteristics should play a role in accountability systems.

In the process of designing Louisiana's School and District Accountability System, policy makers have debated whether similar school comparisons should be reported, and if so, what form such statistics should take. To inform the debate, a national survey of all 50 states was conducted to investigate how other states have been handling this issue. Questions posed to the state department of education personnel included: (1) What variables and methods are used in constructing similar school comparison groups? and (2) How is the comparative information used for accountability purposes.

The survey found that 25 states (50%) either currently produce or plan to produce similar school comparison results. The various models used in constructing and reporting similar schools performance were reported. The types of variables used and the statistical methods employed were discussed. Finally, approaches in reporting and utilizing similar school comparative information were demonstrated.

Preliminary analysis of the survey findings indicated that similar schools comparison information had a great potential in assisting schools in the areas of data-based self-evaluation, diagnosis, and problem solving, provided that the information was used appropriately. The similar school comparison, therefore, can be a very important component in the accountability system.

3:00 p.m.-3:50 p.m **COGNITION AND LEARNING**
Session W#035 **(Discussion Session)**.. **Salon C**

PRESIDER: Kathy Hulley, Lincoln Memorial University

QUALITATIVE ANALYSIS OF METACOGNITION TRAINING PROJECT: SELF-EFFICACY IN STUDENTS WHO SCORE LOW ON THE ACT

J. Stephen Guffey, Larry C. Rampp, and Steven G. Lesh, Arkansas State University

This qualitative case study examined the impact of metacognition training on the self-efficacy of students scoring low on the ACT. The subjects were enrolled in a developmental study skills course and volunteered to participate in an eight-week metacognition skills training program. The researchers were interested in attitudes and behaviors related to academic self-efficacy resident in this group who represented academic under-achievers.

Three forms of data were collected to facilitate triangulation. Three 30-minute observations of the subjects, semi-structured interviews, and a reflective journal kept by the metacognition trainer served as data collection techniques. A grounded theory approach to data analysis was used.

This group began the metacognition skills training program with a low level of academic self-efficacy demonstrated by their passivity, caution, need for affirmation, and low level of help seeking behavior. Each of these problems was addressed and changed positively through the eight weeks of training, demonstrating the very real possibility that lack of academic success was based less in cognitive ability and more in the affective domain. The low academic self-efficacy initially demonstrated by this group stemmed from two primary affective sources: (1) acceptance: The members of this group suffered from a lack of acceptance with regard to things academic, and (2) lack of relevance: The subjects in this case frequently saw schooling as a process for getting a job. They did not make the connection between learning and the solving of life problems.

These subjects exhibited the ability to become engaged and effective students. The authors suggested that the lack of academic success represented in this subject pool lay less in cognitive deficits and more in poor affective approaches to schooling.

TEACHING FOR TRANSFER: CLASSROOM INSTRUCTIONAL IMPLICATIONS

Gerald J. Calais, Marilyn Larmon and Charlie Sparks, McNeese State University,
and JoAnn Belk, Mississippi State University--Meridian

Although the transfer of basic skills, knowledge, and thinking skills is integral to our educational aspirations and expectations, many students believe that little of what they learned in school benefited them in later life. While some of these failures of transfer may be intrinsic to how people think, others may be preventable by using judiciously selected instructional strategies.

Articles and studies focusing on the following topics were selected: (1) the role of conceptual understanding in transfer, (2) the problem of activation of conceptual knowledge, (3) lateral and vertical transfer of automated basic skills, (4) rational task analysis, (5) strategy transfer, and (6) instructional and curriculum implications.

The emerging picture suggests that obstacles to transfer differ depending on which of three components of expertise is entailed: (1) conceptual understanding, (2) domain-specific basic skills, or (3) domain-specific strategies. Research focusing on these three components suggest the following: first, an increase in conceptual understanding increases the probability of transfer (however, possession of such knowledge does not guarantee its successful activation); second, lateral and vertical transfer of domain-specific basic skills depends upon the degree of skill overlap between a known skill and a new skill; and third, the successful transfer of domain-specific strategies is contingent upon the learner's conscious self-evaluation of a strategy's utility.

Implications of teaching for transfer include: using think-aloud protocols from informal interviews with subject matter experts to identify relevant conceptual knowledge; having students learn knowledge originally in a problem-solving context, if the knowledge is to be activated in a problem-solving context; rejecting or modifying curriculum materials considered inadequate should not include rejecting the notion of prerequisite skill relationships; motivating learners to self-evaluate includes the important elements of having clear records reflecting when strategies were employed and what other results were and then asking learners to draw conclusions from these data.

CONNECTING SCHEMA TO PROMOTE LEARNING IN THE MUSIC DISCIPLINE

Richard D. Good and Jennifer M. Good, Auburn University

Examined in this study were the learning processes of musicians in both musical contexts as well as reading contexts in order to explore possible schema connections. In addition, the possible motivational and cognitive effects that can occur when an individual makes these natural connections in schema were explored.

The researchers completed literacy profiles of three musicians, all instrumentalists. The three musicians were selected because they were recognized by their peers as accomplished musicians, and they represented three different levels of professional development: an undergraduate music education major, a graduate student with teaching experience, and a university professor. Each musician completed the Teale-Lewis Reading Attitude Scale and participated in a one-hour, semi-structured interview prompting recall of early memories of learning to read as well as learning to play an instrument. The responses on the reading attitude scale were compared to their philosophies of music attitudes, and the interview responses were analyzed for similar learning themes and connections between the two different disciplines.

The individuals' responses suggested that a similarity in teaching pedagogy occurs in both learning to read and learning to play an instrument. Specifically, the musicians noted similarities in the initial introductions to the learning process when learning to decode text in both written and musical literature, an emotional commitment and emotional connection necessary in both disciplines in order to interpret text successfully, and the description of both learning processes as opportunities for social interaction and performance.

The findings of this study implied that educators can draw upon familiar schema from earlier learning experiences in one discipline to introduce and enhance learning in new and unfamiliar disciplines. The findings also suggested that, when introducing a student to a new learning process, making a connection with a familiar learning process in another discipline is comforting and motivating.

3:00 p.m.-3:50 p.m **EVALUATION**
Session W#036 **(Discussion Session)**..**Salon D**

PRESIDER: Beverly Klecker, Kentucky State Department of Education

THE CHALLENGES AND PITFALLS OF LARGE-SCALE EVALUATION OF A SEX EDUCATION PROGRAM

John Mark Trent, Gerald Halpin, and Glennelle Halpin,
Auburn University

The purpose of this investigation was to explain the challenges and pitfalls associated with the evaluation of a county-wide, abstinence-based sex education program that involved approximately 400 students in the seventh grade and 400 students in the ninth grade.

The challenges and pitfalls surrounding such an endeavor are many. Addressed were problems associated with gaining support from the local community to allow such a program to be implemented along with the problems with obtaining parental permission for student participation. The adapting of the implementation of the sex education program and evaluation requirements to the local school district's policies and procedures were also addressed along with the problems of replication of the sex education in adjacent school districts. Also considered were the internal validity design issues when evaluating sex education programs.

Unique problems associated with administration of an instrument assessing sexually sensitive information were also addressed. Also discussed were problems associated with scanning, correcting, merging, and analyzing the data. Finally, the art of evaluating sex education programs when the measures, designs, and data quality fall short of the desired methodological standards were explored.

ARE SEXUAL ABUSE PREVENTION PROGRAMS AND EVALUATION TOOLS DEVELOPMENTALLY APPROPRIATE FOR ELEMENTARY STUDENTS?

Beth H. Hensley, The University of Memphis

Over the past two decades there has been a proliferation of programs focused on primary prevention of child sexual abuse. Many of these programs have developed as a result of increasing community awareness of children's vulnerability to this form of abuse. In addition, inclusion of primary prevention programs into elementary school curricula has been mandated in numerous states. Although the intent of sexual abuse prevention programs is to increase children's specific knowledge and skills, various research reports and related professional articles have called for the formulation of programs and evaluation instruments that are more developmentally appropriate.

A computer-generated search of ERIC documents (1966-98) was performed using the identifier "sexual abuse prevention." A "hands-on" search was done of *Child Abuse and Neglect: The International Journal* for the past 12 years (1987-98). From the initial search procedures, studies of sexual abuse prevention programs were identified that included children in first through fifth grade. Studies were then selected for inclusion based on descriptions of program content, format, methods and/or evaluation instruments that were sufficient for analysis.

The studies reported a variety of program formats or methods for transmitting the content including lecture-discussion, role playing, dramatic presentation/theater, and print materials. Few research reports either explicitly or implicitly addressed concepts of cognitive development in middle childhood such as referring to Piaget, Vygotsky, information processing model, zone of proximal development, scaffolding, concrete operations, recognition/recall, or related terms in the development of sexual abuse prevention programs. As part of implications, numerous studies present the need for more program evaluation, especially the creation of more developmentally appropriate evaluation tools.

These findings have implications for classroom teachers, school administrators, parents, and community service providers in developing, presenting, and evaluating sexual abuse prevention programs for school-age children that are effective, practical, meaningful, and theoretically grounded.

3:00 p.m.-3:50 p.m **MULTICULTURAL EDUCATION**
Session W#037 **(Training Session)....................Salon E**

TRAINER: Linda F. Cornelious, Mississippi State University

IMPROVING TEACHER EDUCATION PROGRAMS: PREPARING TEACHERS TO TEACH IN MULTICULTURAL CLASSROOMS

As the history of public education has unfolded, schools are feeling the impact of the nation's increasing cultural diversity. Yet, we see teachers who have had little or no experience in dealing with students from other cultures, and who have had little or no formal preparation, attempting to work with issues of race and culture in their diverse classrooms. Globalization of education in a multicultural society has led to the reformation of teacher and teacher training.

Preservice teachers must now train in a broad-based liberal arts program to ensure a comprehensive knowledge in history, science, math and the arts. Because multicultural approaches to education are more complex than commonly acknowledged, teachers must now be prepared to teach students who differ in gender, cognition, ethnicity, physical ability, primary language, cultural heritage and socioecomonic levels. Unquestionably, multicultural education must be an integral element of the teacher preparation program, not merely an added component addressed in one or two courses or by one or two instructors.

The purpose of this session was to introduce participants to the basic principles of multicultural education and to offer practical suggestions for teaching in the culturally diverse classroom. The presenter explained how teachers can learn to create effective and positive learning environments for all students regardless of their culturally diverse backgrounds. Topics for discussion, practical examples, and activities focused on: (1) understanding and valuing diversity, (2) honoring diversity through understanding teaching and learning styles, and (3) implementing teaching activities and strategies in the culturally diverse classroom.

3:00 p.m.-3:50 p.m **ATTITUDES**
Session W#038 **(Discussion Session)**.. **Salon F**

PRESIDER: Ann Arnold Adams, Leflore County (MS) School District

STUDENTS' "UNDERSTANDING" OF EXTRACURRICULAR ACTIVITIES

Dave S. Knowlton, Crichton College

The goal of this study was to explore the value of high school extracurricular activities as understood by first-year college students. Given educational budget constraints and secondary students' needs to earn money and fulfill increasing family responsibilities, such a study was necessary to help determine the value of school-based extracurriculars. To accomplish this goal, a hermeneutical framework was used to frame data collection and analysis.

Participants—students enrolled in a first-year college writing course—were asked to complete a questionnaire dealing with their high school extracurricular activity participation. The questionnaire asked about the benefits and disadvantages of extracurricular activity involvement. It also asked participants to write about specific situations that they recalled from their high school participation. Follow-up interviews were conducted with participants as a means of triangulating findings.

Data analysis was based on a combination of "Thematic Analysis" and qualitative "Splicing." Themes that emerged from the data using these procedures were used to develop a storyline that best explained the ways participants understood the value of extracurricular activities.

The major findings of this study included the following: (1) the social aspects of extracurricular involvement were valued by participants; (2) the content inherent to the activity—passing a ball, for example—was not always highly valued by participants; (3) participants valued competitive processes; and (4) there seemed to be an inherent conflict between the benefits of involvement and the large time demands required for participation.

A variety of implications were developed based on these findings. In short, practitioners and policy makers seemed to have had an obligation to accentuate the social and competitive processes of extracurricular activity involvement. More research is needed to determine students' perceptions of extracurricular activity participation.

ADOLESCENT IDENTITY DEVELOPMENT: VIEWS OF THE FUTURE

David Bell, Arkansas Tech University; Linda Garris Christian, Adams State College; and Robert L. Kennedy, University of Arkansas at Little Rock

The purpose of this study was to focus on adolescents' views of the future, their expectations, and how they think they will achieve these expectations.

The instrument used was the USA Weekend Teen Survey reprinted with permission from the May 18-20, 1990 issue. The survey addresses students' perceptions of the future, as well as their personal plans, goals, and college interests. Over several semesters this instrument was given to 886 students ages 12-19 in rural Arkansas.

Because the responses were available as frequency counts and the groups were usually nominal, the chi-square test was used for the investigation, and the alpha level used was 0.001 to minimize the likelihood of type I errors. Results relating males and females followed by the results relating the age group were presented for each item. Cramer's V was included as a measure of the effect.

There was a statistically significant difference between males and females and what they wanted to be when they grew up. Females were more inclined to be teachers and non-doctor medical professionals. Males were more likely to want to be athletes, business persons, and police officers or members of the military. The most popular male goal was to be an athlete. Most respondents wanted a good education and a job that would give satisfaction. Communication and trust were important in marriage for females; sex, for males. Most respondents felt that they would see a black president by the time they were 40 and that a fifty-first state would be added. Females were more concerned about dying.

The results and implications of this study will be useful for parents and teachers. Adolescents' views of the future serve as important guides in their decision making.

4:00 p.m.-4:50 p.m. **STATISTICS**
(Extended to 5:05) **(Discussion Session)**.. **Salon A**
Session W#039

PRESIDER: Larry G. Daniel, University of North Texas

VARIABLE DELETION STRATEGIES IN CANONICAL CORRELATION ANALYSIS

Jesus Tanguma, Texas A&M University

A large number of experiments in the behavioral sciences involve more than just one set of variables with a given set of predictors. Consequently, a given researcher may be faced with, say, two sets of variables and several variables in each set. In such a situation, canonical correlation analysis is the appropriate method of analysis. However, as the number of variables, as well as the number of predictors, increases the interpretation of the results becomes more difficult. Moreover, the more variables are in the model, the more difficult it may be to generalize the results. In an effort to make the results of a study more parsimonious and generalizable, often researchers wish to delete variables from a study. That is, researchers feel that more is not always better, but sometimes may be worse.

This paper presented three variable deletion strategies in canonical correlation analysis. The first strategy used the canonical communality coefficients of the three functions to decide which variable to delete. The second function also used the canonical communality coefficients but only after deleting the least contributing function. The third strategy used weighted canonical communality coefficients on all three functions. All three strategies provided the researcher with a more parsimonious canonical solution. These methods were illustrated using a small heuristic data set in order to make the discussion more concrete.

SAMPLE SIZE RULES OF THUMB FOR MULTI-LEVEL MODELS

Frank R. Lawrence and James E. McLean,
The University of Alabama at Birmingham

Social science researchers commonly use rules of thumb to guide their data analysis. One prevalent rule of thumb used by the linear regression artisans is the 10-observation rule. There is no complement to the 10-observation rule for use with hierarchical linear models (HLM). There are three reasons HLM analysis lacks analogous rules of thumb. First, hierarchical linear modeling is in an early stage of development. Hence, researchers have not found it necessary to tackle rules of thumb. Second, hierarchical models are more complex. Hierarchical models potentially extend to multiple levels making it hard to prescribe rules of thumb that apply to the diverse situations encountered by HLM modelers. Finally, in the absence of contradictory research HLM practitioners have assumed the rules that apply to linear regression hold for multi-level models. Yet, the assumption has not been validated.

This research evaluated the rule of thumb that 10 observations per predictor variable is a rule that holds for multi-level models. With multiple level-1 coefficients serving as level-2 criterion variables, the total number of predictors is not clear. If all of the level-1 coefficients were correlatively independent then the 10-observation rule of thumb would apply to each of the level-2 equations. It would appear that requiring 10 observations for each of these equations is conservative.

This study was a Monte Carlo experiment. The experiment consisted of a two-level hierarchical cross-sectional nested model. Cluster was nested within treatment condition, and subjects were nested within cluster. There were four levels of observation per predictor, three levels of level-1 sample size, two levels of level-2 sample size, and two levels of treatment (control, and treatment). Each model was replicated 200 times. All models were constructed from random multivariate normal variables.

USES AND MISUSES OF THE CORRELATION COEFFICIENT

Anthony J. Onwuegbuzie, Valdosta State University, and
Larry G. Daniel, University of North Texas

The correlation coefficient is the most common statistic in educational research. Often, use of the correlation coefficient is justified; however, like all statistical indices, it is subject to misuse. That is, many examples exist wherein these statistics are misinterpreted. The purpose of this presentation was to provide an indepth critical analysis of correlation coefficients. As part of this critique, analytical and interpretational misconceptions were presented. Phenomena, such as the "crud factor" and "positive manifold," were discussed.

In interpreting correlation coefficients, researchers often infer cause-and-effect relationships, even though such relationships can, at best, only be determined from experimental studies. Many misconceptions stem from a failure to recognize that correlation coefficients are part of the general linear model (GLM). That is, correlation coefficients are special cases of all other families of the GLM, including *t*-tests, multiple regression, analysis of variance, canonical correlation, and structural equation models. As such, the assumptions that apply to these more complex members of the GLM (e.g., linearity, normality, independence, homogeneity of variance) also are pertinent to correlation coefficients.

Misuses of correlation coefficients are most apt to occur when researchers fail to consider these statistical assumptions. The consequences of such practices were discussed. Other inappropriate practices that occurred were highlighted, including failure to interpret confidence intervals and effect sizes of correlation coefficients, failure to adjust for Type I error, failure to consider the power of tests of hypotheses, failure to consider whether outliers are inherent in the data set, and failure to recognize how measurement error can affect correlation coefficients.

Perhaps the most common error in interpreting correlational analyses has been the failure to evaluate empirically result replicability (i.e., internal replication). A heuristic example was utilized to illustrate how jackknife and bootstrap methods can identify unstable correlation coefficients derived from the full sample.

4:00 p.m.-4:50 p.m. **CULTURE AND SCHOOL ENVIRONMENT**
(Extended to 5:05) **(Discussion Session)**.. **Salon B**
Session W#040

PRESIDER: Elizabeth Lavergne-Pinkett, University of Southwestern Louisiana

THE TEACHING PROFESSION AS PORTRAYED BY POPULAR FILMS

Paige L. Tompkins, Western Kentucky University

This study was conducted to identify and categorize the characterization(s) of teachers presented to the public via popular films. The researcher asserted that, at the least, the public is exposed to these portrayals, while it is possible that public perception of teachers is actually, and perhaps almost entirely, shaped and influenced by them.

Most of the findings presented in the study were the result of the researcher's direct observation of numerous films in which prominent characters were teachers. A smaller portion of the findings were obtained through secondary sources.

Each film was analyzed using a variety of qualitative methodologies to identify emergent patterns and trends. The prevalent patterns that surfaced in the popular media's characterization of teachers were then organized into several distinct categories, ranging from extremely negative to almost superhuman, each of which was discussed in the study. Implications for education suggested by, and addressed in, the study included the following: public support for education funding; the attractiveness of teaching as a profession, the public image of teachers, schools, and education; and professional expectations of teachers.

TEACHER-STUDENT CLASSROOM INTERACTIONS AND CULTURAL DIVERSITY: A DECADE REVIEW OF THE LITERATURE

Melanie A. Bolt, Cecile Cachaper, and Jim C. Fortune, Virginia Tech University

The literature concerning teacher-student interactions in culturally diverse classroom environments is diffuse and complex. Many articles are found in the form of position papers rather than systematic research that, for example, recommend specific policy and pedagogy that often translate into particular classroom interactions between teachers and students. Such practices are disconcerting, given that the bulk of relevant literature is comprised largely of opinion papers. The present review summarized the state of knowledge in this area from the nineties.

In order to review the current literature regarding teacher-student interactions in culturally diverse classroom settings, the following electronic databases were utilized to conduct key word searches: ERIC, PsychLit, and Educational Abstracts. In ERIC alone, 160 relevant articles were identified. Subsequent to the key word searches, the qualitative software package, NUDIST (1998, version 4) was used to categorize and manage the content of relevant articles for this review. Qualitative software packages such as NUDIST allow researchers to systematically review a given area of interest. Too often, researchers seem to select articles for review based on their own deductions (or perhaps biases) rather than examining a breadth of literature that should be analyzed in a systematic manner. Therefore, a primary goal of this review initially involved casting a wide net to promote a more inductive approach to reviewing the literature. The combination of casting a wide net as well as using NUDIST enabled a more comprehensive literature review that may provide direction for future research and pedagogical practices.

SCHOOL LEVEL DIFFERENCES IN TEACHERS' PERSPECTIVES OF MULTIPLE DIMENSIONS OF SCHOOL CULTURE

Douglas R. Davis, Chad D. Ellett, and John K. Rugutt,
Louisiana State University

The purposes of this paper were to: (1) expand and explore the structure of a newly developed measure of multiple dimensions of school culture; (2) report findings from a study that compared elementary, middle school/Jr. H.S., and H.S. teachers' perceptions of elements of school culture; and (3) discuss the implications of understanding school level learning environments from a school culture perspective and the need to be sensitive to school context when measuring teachers' perspectives of school culture.

The Revised School Culture Elements Questionnaire (RSCEQ) was administered to 3279 teachers in 40 schools in a large urban school district in the southeastern U.S. over a two-week period in the fall 1997. Five kinds of data analyses were completed: (1) descriptive statistics for instrument items and subscales, (2) a series of exploratory factor analyses to identify latent constructs measured by the RSCEQ, (3) alpha reliabilities of the factored RSCEQ subscales, (4) bivariate correlations to explore relationships among and between teachers' perceptions of elements of school culture and, (5) replicated factor analyses for sub-samples of teachers divided by school level.

The factor analysis results for the total, usable sample (n=3095) supported a five-factor solution. This solution and an accompanying set of decision rules retained 51 of the original 78 items. The five factors identified and the Alpha reliability of each were as follows: vision/leadership (.93), professional teaching and learning (.89), professional commitment (.87), openness/collaboration (.75), and professional interactions/communications (.76). Intercorrelations among the five factored subscales varied from .37 to 167. For teacher groups partitioned by school level (EM., Md., H.S.), the five identified measurement dimensions varied considerably in item loadings and arrangement on factors. Implications of the results were discussed in view of conceptualizing and operationally defining dimensions of school culture in view of contextually embedded differences among teachers at different school levels. Suggestions for using the RSCEQ in future research were also given.

ACCOUNTS OF PLAY: A DESCRIPTIVE STUDY IN THE CHANGES EXHIBITED IN PLAY ACROSS THREE GENERATIONS

Suzanne F. Redman and Patrick Kariuki, Milligan College

The purpose of this study was to determine the changes in childhood play across three generations. The study focused on three areas of play, including kinds of play, time of play, and the place of play. The research used a descriptive study design utilizing oral interviews and a written survey. The study sample consisted of a random selection of 20 subjects per five age groups for a total sample of 100. Responses to statements on childhood play were ranked using a Likert scale. Numerical values given to each response scored were graphed on point value for a comparison between the five age groups. Results of the data indicated some changes in the accounts of play in each targeted area. The degree of change appeared to be related to geographical location and family structure during childhood. This study implied a relationship between the changes in play to historical events and shifts in society pressure.

4:00 p.m.-4:50 p.m. **TECHNOLOGY**
(Extended to 5:05 p.m.) **(Discussion Session)**... **Salon C**
Session W#041

PRESIDER: Ava Pugh, Northeast Louisiana University

CHANGES IN STUDENT ATTITUDES REGARDING A WEB-BASED HEALTH PROFESSIONS COURSE

Steven G. Lesh, J. Stephen Guffey, and Larry C. Rampp, Arkansas State University

Traditional students often enter learning situations with preconceived attitudes and motivations regarding the delivery of the academic content. Normative values that determine preconceived attitudes include time demands, previous academic experience, and significance of the course related to long-term career plans. Web-based course offerings are a new and different mode of delivery for classroom instruction and may create an atmosphere of anxiety and uncertainty. The researchers investigated the achievement and changes in attitudes for students enrolled in a web-based health-professions course.

Two different instruments were used to gather data: a pre- and posttest to measure learning (mastery of course content) and a pre- and postsurvey to measure change in student attitudes. Both were distributed to students enrolled in the web-based course.

A significant difference was identified regarding student attitudes based on type of delivery. Student attitudes toward technology based instruction were significantly positively changed for those who experienced the web-based environment.

The authors concluded that students were less anxious regarding the environmental setting upon the completion of a web-based course. Learning related to the content of the web-based course was equivalent to that commonly seen in the traditional classroom environment. A supporting conclusion was the potential for cost effectiveness offered by web-based delivery.

ELECTRONIC VS. TRADITIONAL RESEARCH CLASSES

Robert L. Kennedy, University of Arkansas at Little Rock

The purpose of the study was to compare electronic mail and more traditional "chalk and talk" approaches for teaching graduate introductory research classes. The electronic course was first offered in spring 1995 with the spring 1998 semester being the most recently included. There were 71 participants in the electronic classes and 32 in the traditional classes, with a majority of white females enrolled in graduate education programs. Multiple-choice pretests and posttests were given, developed from standardized test preparation manuals available for purchase in academic bookstores.

An analysis of covariance (ANCOVA) was run using posttest scores as the response variable and pretest scores as the covariate. Since the ANCOVA technique involves features of both the analysis of variance and regression, assumptions for both were tested using the NCSS statistical program, version 6.0.21. The assumption of random selection has not been practical for most courses, but the two groups were demographically comparable. Normality and homoscedasticity across all groups were verified using the Omnibus Normality of Residuals and Modified-Levene Equal-Variance tests. Homogeneity of regression was observed in scatterplots of pretest scores versus posttest scores and their trend lines, by treatment and control groups. Therefore, the assumptions required for ANCOVA seemed to be reasonably well met.

The test indicated that the null hypothesis of no statistically significant difference between the traditional (adjusted mean of 12.85, n=32) and electronic (adjusted mean of 11.77, n=71) classes' scores could not be rejected at the 0.05 level [F(1,100)=2.29, p=0.13]. It was concluded, then, that offering the course through electronic mail did not appear to hinder the performance of the students to the extent measured by the multiple-choice tests, suggesting that the electronic course offering provided a flexible alternative for learning.

A LONGITUDINAL ASSESSMENT OF TECHNOLOGY WORKSHOPS FOR UNIVERSITY PROFESSORS

Dorren R. Schmitt, University of New Orleans

This study examined the effect of three technology workshops on mathematics and science faculty. The intent was to find out: (1) had the faculty increased their use of technology and (2) what were the factors that aided or hindered the integration of technology.

Over the past three years, 132 professors attended technology workshops to aid them in the integration of technology into their classrooms. The workshops covered topics including the Internet in classrooms, graphics calculators as instructional tools, distance learning, creating web pages, real world data in undergraduate science classes, using mathematics as a tool for teaching and learning, etc.

Prior to each workshop and following the workshop, the participants filled out a survey pertaining to how they used technology in their classes. After the third workshop an additional questionnaire was sent out to determine what factors besides the technology workshop either helped or hindered the integration of technology into their classes.

The data from the yearly surveys were analyzed using parametric and nonparametric statistics. The questionnaire following the last survey was analyzed through holistic groupings to determine factors promoting or inhibiting change.

Data from the yearly surveys was collected and analyzed. All of the participants incorporated technology in at least some of their classes. All participants showed some increase, and most exhibited statistically significant increase in the use of technology. It was also not surprising that the most change exhibited in each participant was in the area of technology they focused on in the individual workshop.

4:00 p.m.-4:50 p.m. **ADULT AND VOCATIONAL EDUCATION**
(Extended to 5:05) **(Discussion Session)**... **Salon D**
Session W#042

PRESIDER: Carol A. Mullen, Auburn University

A DELPHI STUDY OF THE DESIRED CHARACTERISTICS OF VIABLE AND SUSTAINABLE WORKERS IN 2015

Brenda Pennington Dean, Hamblen County (TN) Schools,
and Russell West, East Tennessee State University

The Delphi study ascertained the opinions and perceptions of industrial leaders in a 10-county area of middle eastern Tennessee to forecast characteristics of valuable workers in the year 2015. The following areas were studied as they related to the forecast within the area: (1) projected employment skill demands of business and industry, (2) initiatives required by business and industry to meet forecasted needs, and (3) initiatives required of education to meet the forecasted needs of industry and business.

The Delphi panel of 22 business and industry leaders was nominated by the county executive of the 10 counties, officials at Walters State Community College, and members of the Regional Private Industry Council and included 16 males and 6 females, of which 21 were Caucasian and one was African American. The following segments of industry were included in the panel: general manufacturing, metalworking, furniture production, healthcare, printing, automotive, textiles, chemical production, and a category described as other.

In the first iteration, panelists responded to a questionnaire consisting of 17 open-ended questions. These questions were related to the characteristics of valuable workers for the year 2015. The narrative responses in round one revealed emerging consensus, which was narrowed by the second round iteration. Opinions or perceptions that were mentioned five times formed the basis of the second round of the Delphi in which the panelists responded to 55 items measured on a Likert scale.

The results indicated a clear need for workers who possessed interpersonal and problem-solving skills, as opposed to purely technical expertise. The findings of the study suggested implications for better articulation between public school curricula and industrial needs.

EFFECTS OF INVESTMENT IN EDUCATION AND TRAINING ON PERFORMANCE IN MANUFACTURING COMPANIES

J. Fred Williams and Jacquelyn P. Robinson, Auburn University

Industrial managers do not have an effective way to relate education and training costs to employee performance. This study evaluated the relationship between company investment in the education and training of employees, and industrial performance. Data were gathered from manufacturing companies in 14 northeast Alabama and nine northwest Georgia counties. Companies were selected at random from industrial directories for the respective states and counties. A survey instrument was developed and mailed to top managers of the selected companies. Two hundred seventy-five questionnaires were mailed, 134 were returned, and 120 were complete and usable. Fourteen were either blank or incomplete and unusable.

The survey instrument was developed with the help of a focus group of 13 top level industrial managers of manufacturing companies selected from the same region as those that were the subject of the study. The instrument consisted of 65 questions designed to gather performance and corporate culture information covering the subject areas of: (1) investment in education and training, (2) productivity, (3) quality, and (4) health and safety.

Data were analyzed using regression and analysis of variance (ANOVA). Performance data from productivity, quality and health and safety, identified as dependent variables, were regressed against the independent variables of investment data for education and training. A research hypothesis was posited: "Increases in company investment in employee education and training will be accompanied by corresponding increases in the level of performance in each area studied."

Analysis of the data appeared to support the research hypothesis. Several variables in the subject area of education and training seemed to predict performance in productivity, quality, and safety. Higher levels of investment in education and training in terms of money, time, methods, and techniques could be expected to result in higher levels of performance in productivity, quality, and safety.

AN ASSESSMENT OF TECHNOLOGY CLASSROOM ENVIRONMENTS IN CHINESE UNIVERSITIES

Jiexiu Li and Russell West, East Tennessee State University

The purpose of this study was to investigate the characteristics of graduate classroom environments as perceived by the graduate students and faculty in technology courses at Chinese universities. Relationships were examined between the different dimensions of the social environment of the graduate technology classrooms. Adult Classroom Environment Scale (ACES) was used to measure the actual and ideal classroom environments on seven dimensions.

The research was conducted during the fall semester 1998. Participants in this study included 317 graduate students and eight teachers in eight classes from six universities in Beijing, China. The results of data analysis showed that there were significant differences in graduate students' perceptions of the actual and ideal classroom environment. Perceptions of teachers and graduate students in each class differed in their views of the actual classroom environment. Students felt that courses were well-organized, clearly-delivered, and task focused. Students felt that they needed more influence in the classroom, and that instructors should focus on individual development. Teachers perceived Organization and Clarity and Teacher Support as more characteristic of their classrooms, but they did not see Student Influence and Personal Goal Attainment as important.

There were few significant differences on most of dimensions of the actual classroom environment, when contrasted according to age, major, and work experience. Males and females did, however, see Organization and Clarity, Personal Goal Attainment, Affiliation, and Involvement differently. These findings indicated that graduate technology classrooms in Chinese universities was still quite teacher-centered.

4:00 p.m.-4:50 p.m. **PARENT INVOLVEMENT**
(Extended to 5:05) **(Discussion Session)**.. **Salon E**
Session W#043

PRESIDER: Fred Groves, Northeast Louisiana University

THE PEABODY FAMILY INVOLVEMENT INITIATIVE: PREPARING PRESERVICE TEACHERS FOR FAMILY/SCHOOL COLLABORATION

Laurie J. Katz, Middle Tennessee State University, and
Jerold P. Bauch, Peabody College of Vanderbilt University

A study was conducted to explore the impact of preparing preservice teachers to involve families in their child's education. Four questions guided the study: (1) What are the attitudes about parent involvement activities of teacher education students and graduates after completing a parent involvement parent training program? (2) Which strategies and approaches did student teachers and classroom teachers think are important and feasible? (3) Which strategies and approaches did classroom teachers use in their schools? and (4) Were there differences in the parent involvement attitudes and practices between preservice teachers who completed the program and those who had no specific training?

Three groups of preservice and inservice teachers completed surveys that addressed attitudes, feasibility, and preparation factors for nine parent/school involvement activities. The first group was preservice teachers who had completed a family-school involvement course. The second group had just completed their student teaching. The third group was certified teachers who had completed one to three years of classroom teaching. All three groups were asked similar questions and added inquiries about the actual involvement strategies used by the practicing teachers.

Initial findings showed that more teachers engaged in parent involvement activities that are traditionally part of many school policies and programs. Teachers found themselves more prepared to engage in parent/school activities if they had completed a parent involvement course as undergraduates. Teachers who took this course were also more likely to engage in nontraditional parent/school activities. Both groups of preservice teachers thought that all of the parent involvement activities were important. However, perceptions of their feasibility varied. Students considered themselves most prepared in the activities that had been emphasized in the course. In spite of this preparation program, both preservice and practicing teachers called for even more training in family/school involvement.

SCHOOL IMPROVEMENT THROUGH COMMUNITY DIALOGUE: THE FIRST COMMUNITY STUDY CIRCLES ON EDUCATION IN ARKANSAS AND OKLAHOMA

Jo Sykes Chesser and Larry McNeal, University of Arkansas at Little Rock

Can community engagement that fosters dialogue between diverse individuals and groups result in school improvement and increased parental involvement in public schools? This study examined the Study Circles program on education that was conducted in Arkansas and Oklahoma in fall 1998. Study Circles are a community involvement strategy for collaborative problem solving. They are small, highly participatory groups led by trained facilitators using materials provided by the Study Circles Resource Center. Used for racial and criminal justice deliberation, this is the first time statewide organizations on education have been implemented.

Each partner of Calling the Roll: Study Circles for Better Schools had specific goals related to the needs of their state or organization, but they collaborated to develop and revise pre- and post-questionnaires. The questionnaires were to provide demographics and other participant information, evaluate the Study Circles program, and examine the impact of their efforts. Participants took the pre-questionnaire before the Study Circles began. After four two-hour sessions, the post-questionnaires were given.

Fourteen communities provided research data from 626 pre-questionnaires and 380 post-questionnaires. From these questionnaires 243 were pre-post matches. The Center for Research on Teaching and Learning at the University of Arkansas in Little Rock analyzed the questionnaires. The information received from these first efforts indicated a positive response to this type of group dialogue and collaboration. A larger percentage of parents with school age children was noted in the communities that were organized through the school superintendents.

Although the data implicated success in the program beginning, an impact survey was conducted in fall 1999 as a follow-up of the implementation and results of the group's action plans for their public schools. New communities are organizing Study Circles, and the research groups will continue to evaluate the results.

HOMESCHOOLING IN ALABAMA: PERSPECTIVES OF PUBLIC SCHOOL SUPERINTENDENTS AND HOMESCHOOLING PARENTS

Anna T. Kozlowski, The University of Alabama

The purpose of the study was to describe homeschooling in Alabama from the perspectives of public school superintendents and homeschooling parents. The study addressed the extent, causes, and experiences of homeschooling and the relationship between homeschoolers and public schools. Homeschooling is a growing national trend. The increase is usually attributed to growing dissatisfaction with schools.

Alabama superintendents were surveyed using an instrument developed from the literature. The response rate was 59%. The survey addressed the extent of the practice, parents' stated reasons, superintendents' concerns, and relationships between schools and homeschoolers. It concluded with an open-ended question on how superintendents should respond to parents who want to homeschool. Parents (n=12) were interviewed in person or by e-mail using a structured interview format. A cross-case analysis was performed on the qualitative data.

The incidence of homeschooling (1.5%) was slightly above the national average and appeared to be a growing trend. The commonly reported reasons were protection from negative social influences and teaching moral and values explicitly. Superintendents were concerned about parents' capabilities; curriculum quality; achievement; and social isolation. There was virtually no contact between schools and homeschoolers.

Homeschooling parents reported dissatisfaction with the academics and socialization of schools. They valued providing individual attention, promoting values, and fostering independence. Parents felt capable of providing appropriate instruction and socialization. Curricula varied from traditional and religious to unschooling models.

State laws may encourage officials to see homeschooling as a religious rather than educational issue. Superintendents are more likely to be familiar with homeschooling failures than successes. The parents' grievances were consistent with contemporary criticisms of the factory model of schooling. Homeschoolers were generally content with the absence of regulation in current laws; some opposed required enrollment in church schools.

4:00 p.m.-4:50 p.m. **AT-RISK STUDENTS**
(Extended to 5:05) **(Symposium)** .... **Salon F**
Session W#044

ORGANIZER: C. M. Achilles, Eastern Michigan University

WHAT DOES THE FINDING OF A CLASS-SIZE EFFECT MEAN FOR PROFESSORS AND PRACTITIONERS?

Introduction

C. M. Achilles, Eastern Michigan University

Interest in small classes (18:1) or so for early primary youngsters is becoming a policy issue at state and federal levels. Although substantive results have long been available on class size and student outcomes, there still seems to be much confusion about what the research really says.

Summary of Key Class-size Reduction (CSR) Findings from Major CSR Studies

C. M. Achilles, Eastern Michigan University

This paper summarized results obtained in well-designed CSR efforts (1975-99). Detailed comparative findings in terms of such variables as percent of gains that favored small vs large classes have been compiled for five current (1996-99) CSR efforts. Based on interpretation derived from research reports, the paper identified major problems in establishing CSR as a widespread policy (space, personnel, poor definitions, etc.), and offered case-study examples of how these problems were being overcome.

The Necessity for Patience, Perseverance, and Presentation

H. P. Bain, Retired STAR Principal Investigator, and Jayne Boyd-Zaharias, Director;
B. DeWayne Fulton, Data Manager, HEROS, Inc.; and STAR Staff (1986-90)

By 1998 most STAR students who entered the experiment in 1985 (K) or 1986 (grade 1) had either graduated from high school or had left the STAR cohort (e,g., dropout, grade retention, mobility). Painstaking tracking of students turned up an adequate long-range sample to allow researchers to compare the high school (and beyond) characteristics, achievements, and outcomes of students who began their schooling in STAR regular or small classes. The highly positive results favored small-class students in such areas as behavior, grades, enriched curricula, and post-high school outcomes.

The paper documented the concerted effort to get results into the hands of policy persons, including meetings with teacher associations, a press conference (April 1999) at the National Press Club, and lobbying efforts in Washington, DC.

A New View: Reanalysis and Reinterpretation of the STAR Database

Jeremy D. Finn, STAR Design and Analysis Consultant (1984-99),
and Sue Gerber, State University of New York Buffalo

The original STAR analyses employed ANOVA and MANOVA models to answer the basic questions posed in the enabling legislation. Reanalyses in 1999 employing Hierarchical Linear Models (HLM) on a refined cohort-driven data set answered new questions, such as: How many years of small-class treatment provide specific outcomes? Results seriously question the STAR critics' interpretations that only a year or two of early small-class experience will provide the expanding, long-term benefits that lead to a trajectory of school success.

What Does the Small-Class Effect Mean For Professors and Practitioners?

In this paper the symposium's authors presented a research-based, "how to" manual for two specific groups of educators: higher education personnel and K-12 practitioners including teachers, administrators and school board members. The paper included normative statements (what should be done) for both groups, followed by action steps that were supported by (1) research outcomes and (2) examples of the applications of the results. The final section described areas of important policy considerations, examples of emerging theories that explain the class-size effects, and research needs.

5:30 p.m. **Session W#045**	**MSERA KEYNOTE ADDRESS**......................**Grand Ballroom North**
PRESIDER:	Gerald Halpin, Auburn University, President, MSERA
Introduction:	Edith A. Miller, Auburn University
Speaker:	William A. Mehrens, Michigan State University
Topic:	**Consequences of State Assessment Programs: What is the Evidence?**
Welcome:	George Uhlig, Dean, College of Education, University of South Alabama
6:30 p.m.-7:30 p.m. **Session W#046**	**RECEPTION SPONSORED BY THE COLLEGE OF EDUCATION, UNIVERSITY OF SOUTH ALABAMA**.............**Grand Ballroom Patio**

8:00 a.m.-4:00 p.m.	**REGISTRATION**	**Grand Ballroom Foyer**
7:45 a.m.-8:45 a.m.	**GRADUATE STUDENT AND NEW MEMBER BREAKFAST**	**Skylounge**
9:00 a.m.-9:50 a.m. **Session T#001**	**EFFICACY** **(Discussion Session)**	**Salon A**
PRESIDER:	William Person, Mississippi State University	

THE ROAD TO PRESERVICE TEACHERS' CONCEPTUAL CHANGE

Huey-Ling F. Lin, Alabama State University;
and Jeffrey Gorrell, Auburn University

When an external event challenges preservice teachers' ideas about teaching and learning, efforts to solve the conflict lead to professional growth. Some researchers suggest that questioning, reflecting, and problem solving can achieve the goal of "concept change" (Clark, 1988; Crow, 1987; Feiman-Nemser, McDiarmid, Melnick & Parker, 1989; Gunstone & Northfield, 1992; Posner, Strike, Hewson & Gertzog, 1982). Under such circumstances, preservice teachers can construct their own learning through an interaction among their beliefs, their prior knowledge, and their experiences.

This study involved a series of seminars designed to help students understand and clarify their views about teaching and learning, and to create a condition for the development of sharing understanding of the underlying concepts that affect their learning to teach. The seminars tested the hypothesis that learning to teach is improved through the application of a questioning and reflective orientation.

Twenty-five graduate students enrolled in a seminar in early childhood education participated in the study. Self-questioning strategy training was conducted to help students raise specific higher-order questions from the assigned reading materials. The reciprocal peer-questioning condition was created to promote the social construction of knowledge because it provides a context that fosters the emergence and resolution of socio-cognitive conflict (King, 1990). After each seminar session, students recorded their thoughts regarding topics discussed, issues raised, and questions unanswered. Weekly journals were collected by the instructor for analysis.

NUD*IST (Non-Numerical Unstructured Data Indexing, Search and Theory Building) software was used for initial theory building and analysis. Students' weekly journals entries indicated the conceptual transformations that these students went through. This study illustrated how a seminar structure can be useful in helping preservice teachers' evolving constructions of knowledge, in promoting reflection, and in enhancing conceptual change.

KOREAN PRESERVICE TEACHERS' EFFICACY

Young Suk Hwang, Western Illinois University;
Huey-Ling Lin, Alabama State University; and
Jeffrey Gorrell, Auburn University

Research on teacher efficacy reveals that teachers who show high efficacy have a greater sense of control and confidence in their ability to influence student learning than those who have low efficacy (Allinder, 1995; Ashton, Webb, and Doda,1982; Coladarci, 1992; Evans & Tribble, 1986; Gorrell & Hwang, 1995). Additionally, teacher efficacy has been used to examine teacher preparation programs and found to change over the course of programs (Lin & Gorrell, 1998).

The purposes of this study were to examine teachers' efficacy among Korean pre-service elementary and secondary teachers beginning and completing their teacher education programs. Participants in this study included 106 elementary and secondary teacher education students at beginning and ending points in their teacher education programs.

Multivariate tests (MANOVA) of participants' responses to a Korean version of Gibson and Dembo's (1984) teacher-efficacy scale revealed no statistically significant multivariate main effect ($p. > .05$) related to experience in the program. Examination of the global mean of individual items showed stability in Korean preservice teachers' sense of efficacy over their preparation program. Eleven of 18 items' means were higher than the group median (3.2). Nine of the eleven items that were higher than the group median related to the personal efficacy.

Results indicated that Korean preservice teachers entered teacher preparation programs with a high sense of personal efficacy beliefs and tended to maintain the high sense of efficacy during the program of teacher education programs. These selected elementary and secondary preservice teachers were highly academic and capable individuals, and set their career goals for teaching before entering teacher education programs. The findings of this study from such a strongly education-oriented society as South Korea can add to an understanding about cultural differences and similarities in teacher-efficacy.

TEACHER EFFICACY MOTIVATION BELIEFS AND THEIR RELATIONSHIPS TO DIMENSIONS OF SCHOOL CULTURE

Chad D. Ellett, John K. Rugutt, and Douglas R. Davis,
Louisiana State University

This study examined relationships between a new measure of teacher efficacy motivation beliefs and teacher perceptions of multiple dimensions of school culture for a sample of 1493 teachers in 36 schools in a large school district in the southeast (fall 1998). The teacher efficacy measure used is an alternative to teacher efficacy measures typically used in the extant teacher efficacy research that taps teachers' beliefs about their capabilities to execute certain courses of action. This study assessed teachers' beliefs about personal motivation and persistence in pursuing important school goals (e.g., the enhancement of student learning) in the face of barriers to goal attainment and failure to obtain goals. Teachers also provided perspectives about efficacy motivation levels of teacher colleagues. Elements of school culture were measured with a revised version of the School Culture Elements Questionnaire (SCEQ).

Analyses included descriptive statistical summaries, extensive factor analyses of the two measures, intercorrelations among measurement subscales, and a series of analyses regressing dimensions of teacher efficacy on identified elements of school culture. Factor analyses identified three distinct elements of school culture measured by the RSCEQ (Vision/Leadership, Collegial Teaching and Learning, Professional Commitment). Factor analyses of the efficacy measure suggested three independent efficacy motivation dimensions: (1) teacher personal efficacy (Me), (2) collective efficacy (We), and (3) organizational efficacy (Thee). Alpha reliabilities for the various subscales ranged from .82 to .96.

Intercorrelations among school culture and teacher efficacy dimensions demonstrated moderate (.42) to moderately strong (.63) relationships. Significant variation among schools in the three factored dimensions of the efficacy measure (Me, Thee, We) was differentially accounted for by the three SCEQ dimensions in three separate regression analyses.

The findings were discussed in view of implications for future use of the two measures in future studies of school culture and teacher efficacy motivation. In addition, the conceptualization of teacher efficacy as a unitary construct and existing measures were called into question by the results. The need to better conceptualize efficacy motivation and to link elements of efficacy and school culture to school change and improvement were also highlighted.

9:00 a.m.-9:50 a.m. **HIGHER EDUCATION ACHIEVEMENT**
Session T#002 **(Discussion Session)**.. **Salon B**

PRESIDER: Sandra M. Harris, Auburn University

AN ANALYSIS OF THE PREDICTIVE VALUE OF MOSBY'S ASSESS AND HESI'S COMPREHENSIVE EXIT EXAMS FOR THE NURSING LICENSURE EXAM

Ruby K. Dunlap, Tennessee State University

The purpose of nursing education is to produce competent practitioners of nursing. Summative evaluation of a nursing education program of study includes licensure by examination. The test content is based on surveys of first-year nurses and the competencies actually required of them in that first year of practice. Failure to pass the licensure examination has serious implications for the individual graduate nurse, the school of nursing, and the employer. The ability to accurately predict the probability of a student's success on the licensure examination is critical to a school of nursing and to the student. Commercial tests that are available for such assessment include the Mosby ASSESS test and the HESI comprehensive exit examination. Course grades and grade point averages have also been studied as potential predictors of student success. Testing has been further complicated by the ongoing evolution of the licensure examination itself, from a paper and pencil test to an interactive computerized test.

The purpose of this pilot study was to examine the predictive validity for the licensure examination, the dependent variable, of the ASSESS test, the HESI test, and selected course test grade averages, and grade point averages, the independent variable. The convenience sample was a class of 21 nursing students. Multiple regression analysis was used to discover which of the variables was the strongest predictor.

It was discovered that, for this sample, the pathophysiology test score average was the strongest predictor. The ASSESS test and the HESI test were the next strongest predictors. In contrast to what previous studies had found, none of the grade point averages were significantly related to success on the licensure examination.

THE PREDICTION OF ACADEMIC PERFORMANCE AMONG MBA STUDENTS

Kristy D. Warren, Jwa K. Kim, and Donald L. Curry,
Middle Tennessee State University

This project was designed to investigate the relationship between the Graduate Management Admissions Test (GMAT), undergraduate grade point average (UGPA), and graduate grade point average (GGPA). The sample consisted of 96 graduate students in the Master of Business Administration program at a regional university in the southeast. Subjects with an UGPA higher than 1.00, and a GMAT score higher than 200 were included for analysis. This sample had GMAT scores ranging from 280 to 670, UGPAs ranging from 1.90 to 3.98, and GGPAs ranging from 3.00 to 4.00.

It was found that female students had significantly higher GGPAs, *t* (94) = 2.71, $p < .05$, and UGPAs, *t* (94) = 2.05, $p < .05$, than male students, respectively. These results indicated that GMAT scores as well as UGPA were good predictors of GGPA, *F* (2,96) = 19.66, $p < .05$, $R2 = .2906$. However, when GMAT scores and UGPA were combined together into a new scale that was adopted by the institute ((UGPA*200)+GMAT score), the predictive validity of these measures increased, *F* (1,94) = 45.71, $p < .05$, $R2 = .3272$. This particular scale was also found to be a good predictor of midpoint GGPA (MGGPA), *F* (1,94) = 45.05, $p < .05$, $R2 = .3240$. MGGPA is the GPA after the first completed 18 hours of the MBA program. The students' age and the associated number of credit hours appeared to have little or no predictive value. Some characteristics of the sample compared to other similar studies were discussed.

USING DISCRIMINANT-FUNCTION ANALYSIS TO PREDICT STUDENT SUCCESS IN CORE ENGLISH CLASSES

Steven Horton, Neelam Kher, and Susan Molstad,
Northwestern State University of Louisiana, and
Gayle Juneau, University of West Florida

Student retention in higher education is becoming paramount now that there is heightened emphasis on accountability performance based funding. Thus, schools are reevaluating their academic programs to determine their efficacy in meeting curricular goals.

This study was part of a larger project, which focused on the effectiveness of prerequisite courses and other demographic variables in predicting student success in various core courses at the undergraduate level. The objective of the present study was to determine a model to accurately classify students on the outcome variable (success in a core English course). The predictor variables for the model included scores on the ACT and the developmental English course, age of the student, gender of student, type of high school diploma (traditional or GED), student classification based on hours pursued (full or part-time), and type of high school attended.

All students who entered the university as a first-time, full-time freshman during a fall semester were the student cohorts for the study. Exactly 1,062 students were included in the census of those who took the English course. Approximately 60% of the students were female. The ages of the students ranged from 16 to 47 years with a mean age of 20.21 years and a standard deviation of 4.56 years.

Wilks Lambda ($p<.05$) indicated that the discriminant function was statistically significant in it's ability to predict student success in the core English class. However, the model did not provide support for the use of a developmental course in English as a prerequisite for success in the core English course.

Results of the study suggested that current developmental education may not be providing the necessary preparation needed for successful completion of the core English course. Clearly, such findings not only have implications for the content of prerequisite courses, but also for the teaching methodology.

9:00 a.m.-9:50 a.m.	**READING AND TEACHER EDUCATION**
Session T#003	**(Discussion Session)................ Salon C**
PRESIDER:	Susan T. Franks, Georgia Southern University

INVESTIGATING PRESERVICE TEACHERS' LITERATURE SELECTION PROCESS

Katie Charisse and Neves Michna, University of Southern Mississippi

This study delved into the selection and evaluation practices of a class of preservice teachers in Mississippi to look for trends in choosing literature, acquiring literature for classroom use, and factors that affect the appeal/dislike of literature.

Participants were 16 undergraduate students (15 female and 1 male) ranging in age from 19 to 45. The racial makeup of the class consisted of two African Americans and 14 Caucasian students. They were enrolled in a junior level language arts course designed for elementary school majors in a large public university in Mississippi.

Data were collected using a five-question survey that addressed why literature was selected, where literature was acquired from, most liked aspect of the literature, least liked aspect of the literature, and future use of the literature selection. Each participant filled out a survey and attached it to each of their lesson plans. The survey was taken three times during the course of the semester term with each lesson plan they taught to get a broader view of individual participant selections. Five participants were also interviewed by the researcher. Participants for the student interviews were selected by the researcher. Five questions were chosen to guide the 15-minute interviews, which was conducted at the interviewee's convenience and held at the place of choice for the interviewee.

Information from the two instruments provided the data used in this study. The researcher looked for commonalties among answers in the qualitative data collected. These commonalties formed the basis for categorizing the information collected. Tables and figures displaying data obtained were developed and used to identify emerging patterns from the data.

PRESERVICE TEACHERS AS MEMBERS OF A LITERARY SOCIETY: A PILOT STUDY

Mary E. Howe and Nancy Verhoek-Miller, Mississippi State University

The purpose of this research was to investigate preservice teachers' self perceptions as members of a literary society. Students were enrolled in the undergraduate language arts' methods class as a part of the pre-student teaching block. The students took part in a literary society that encouraged members to become life long readers. Members chose four texts from a list of pre-selected classics. Members read and responded to texts using a variety of modalities.

Much research (Allington & Walmsley, 1995; Atwell, 1987; Routman, 1996; Smith, 1994; Weaver, 1994) has been conducted regarding preservice teachers' reading habits and the quality and quantity of books they have read. In most cases, the data have strongly suggested that pre-service teachers should read more types of books, as well as read more of them. While these concerns have been well-accepted among educators, few studies have been undertaken to involve and investigate the effects associated with having preservice teachers actively participate in a literary society.

Responding to literature through writing and literacy circles has been emphasized in current practice, but responding through the arts, specifically photography, has not occurred as frequently. Participating preservice teachers will be able to communicate with the literary society through a project website linked to that of the College of Education. As noted earlier, the ultimate goal of this project was to involve preservice teachers as life long readers and active participants in a literary society so that they can better serve as role models for their students and acquaint them with the pleasures associated with being active, life long readers.

TEACHERS' ATTITUDES TOWARD A CONSTRUCTIVIST APPROACH TO COMPUTER INTEGRATION INTO AN EXISTING READING CURRICULUM

J. Matthew Myers and Regina F. Halpin, Mississippi State University

The integration of technology and how to train teachers effectively has been a pertinent issue. This study outlined a model program involving a school-university partnership that was implemented using the school district's existing reading program. The problem of teacher anxieties toward technology, when approached with the challenge to use computers to teach reading, was investigated. The sample was 54 K-3 teachers from a rural school district involved in a pilot project that involved a constructivist approach to integrating the use of computers into an already existing reading program as opposed to introducing a new or revised curriculum. A survey was obtained from the literature and modified to gather the information and was administered in a pre-post fashion. Three pairs of repeated measures involving the teachers' attitude toward computers, teachers' opinions of computer applications in the classroom, and the teachers' potential future use of computers were tested. The study also investigated the effect that previous workshop experience had on these three measures. Because the data were categorical, a nonparametric form of repeated measures MANOVA was employed to test each of the three research hypotheses.

Obviously, the results indicated that teachers with previous experience in technology workshops were more comfortable with computers. However, regardless of previous workshop experience, the constructivist approach to integrating computer use into the already existing curriculum had a significant positive effect on teachers' attitudes and their potential use in the future. The implication was that the constructivist approach to integrating technology into a teacher's existing curriculum improved their attitudes toward computers and increased their likelihood of using computers in the future as instructional tools. It was also found that the opinion of the usefulness of computers in the classroom was not significantly changed, indicating that teachers did see a need for computers regardless of their anxiety toward them.

9:00 a.m.-9:50 a.m. **CONVERSATIONS WITH WILLIAM A. MEHRENS**
(Special Graduate Student Session).................................**Salon D**

9:00 a.m.-9:50 a.m. **STATISTICS, RESEARCH AND FIELD EXPERIENCE**
Session T#004 **(Display Session)**...**Salon E**

GET THE RIGHT JOB--HIRE THE RIGHT PEOPLE! APPLIED PRACTICE FOR PROSPECTIVE TEACHERS-ADMINISTRATORS

Debra Lee and Charles A. Rohn, University of Montevallo

The topic of this presentation was to discuss an instructional technique that provided prospective teachers and administrators an opportunity to further develop their knowledge base about the interviewing process and to refine their interviewing skills. This activity was developed through the collaborative efforts of the Educational Leadership and Teacher Education Programs.

Principals must have the skills necessary to hire the best possible teachers. Those applying for teaching positions must have skills that will allow them to effectively communicate their commitment to children and ability to teach. Practicing administrators state that new principals often do not have the skills necessary to select the best candidates. They also state that prospective teachers often have very poor skills in communicating about their teaching skills and abilities in an interview setting. Thus, it becomes imperative for colleges of education to increase the knowledge base and to provide opportunities to refine interviewing skills for those training to become teachers and administrators.

To accomplish these objectives, student teachers were scheduled for mock job interviews with administrative interns. Preliminary sessions were conducted with both student teachers and administrative interns providing information concerning interviewing procedures and techniques. Student teachers were assisted with completing an application and resume for the activity. Administrative interns conferenced with practicing principals and developed question sets. Interviews were then organized around a triad model in which an administrative intern interviewed a student teacher while a second administrative intern observed the activity. The role of the second intern was to provide evaluative feedback to both participants concerning their performance. Administrative interns traded roles for the next interview session. At the conclusion, all participants completed a survey, which indicated strong support for the activity.

IMPROVING ACHIEVEMENT AND STUDENT SATISFACTION THROUGH CRITERIA-BASED EVALUATION: CHECKLISTS AND RUBRICS IN EDUCATIONAL RESEARCH COURSES

Vicki A. Wilson, Wilmington College, and Anthony J. Onwuegbuzie,
Valdosta State University

The traditional "black box" approach to evaluation of assignments in the educational research course has at least two effects: (1) products that fail to meet the expectations of the instructor and (2) frustration on the part of students who do not know exactly what is expected and who are consequently confused about or disappointed in the grades received. The purpose of this display session was to share rubrics and checklists that have been pioneered and refined by professors of educational research at the master's and doctoral levels in an effort to improve both student performance and student satisfaction in research courses.

Displayed and discussed were Likert-scale scoring checklists for dissertation-format research reports, research proposal presentations, and research article critiques. Rubrics describing unacceptable, acceptable, and exemplary performance on each aspect of a master's thesis and a group research project presentation were also presented. Copies of the checklists and rubrics were available to conference participants.

TRAVELING THROUGH THE LAND OF OZ: TEACHING QUALITATIVE RESEARCH

Kathy K. Franklin, Nicola A. Conners, Rob Edleston, Steve Marvin, Christy Oberste,
I. J. Routen, and Tricia Satkowski-Harper, University of Arkansas at Little Rock

The sharing of successful pedagogical techniques is an important form of mentoring for college instructors. Sharing successful pedagogical innovations employed by professors teaching qualitative research methods is imperative in light of the challenging complexities of phenomenological inquiry (Tierney & Lincoln, 1994).

The purpose of this display session was to share the pedagogy of one instructor teaching a qualitative research method course and the learning experiences of six graduate students who participated in that course. The qualitative course is a required component in the doctorate program at a metropolitan university. Of the six students participating in the display session, one student took the course during the summer semester 1997 with the remaining five students taking the course in spring 1999. The instructor had taught this graduate course for three years.

The instructor has designed each course with two primary objectives: (1) to promote research peer and instructor mentoring and (2) to engage students in a tactical learning experience. To accomplish these objectives, students in the methods course work as a team alongside the instructor on a class research project. As a team, the students collect and analyze the qualitative data, write the research report, present the data at a regional or national conference, and submit the manuscript to a journal. With class sizes of up to 20 students, managing the logistics of the class research project and report can be a challenging task.

In the display session, the instructor shared the (1) philosophy informing this type of pedagogy, (2) logistics in organizing and managing a class research project of this magnitude, (3) benefits and challenges of this teaching method, and (4) strategies used to promote mentoring. The students shared their opinions, both pro and con, about their learning experience and future plans for conducting qualitative research.

PREFERENCES OF PRE-PROFESSIONALS WHEN CONSULTING WITH SCHOOL PSYCHOLOGISTS

Gary L. Cates, Katrina N. Rhymer, Christopher H. Skinner, and Sandy Devlin,
Mississippi State University

This survey was conducted to examine preferences of pre-professionals (i.e., elementary education, secondary education, special education, and educational psychology students) when consulting with school psychologists. Participants were asked to read a scenario and then select which type of school psychologist they would prefer to consult with on the case. The descriptions of the school psychologists were identical except for the placement of experience: special education classroom or mental health clinic. A chi-square Goodness-of-Fit test showed that special education majors and educational psychology majors preferred the school psychologist with special education experience over the school psychologist with experience in a mental health clinic. However, elementary education majors and secondary education majors did not prefer one type of experience over the other. Discussion focused on the implications of type of training experiences for school psychologists when consulting with future professionals.

9:00 a.m.-9:50 a.m. **COMPUTER EDUCATION**
Session T#005 **(Training Session, 2 hours)**.. **Salon F**

TRAINER: Gunapala Edirisooriya, East Tennessee State University

TRICKS AND TREATS OF ELECTRONIC EXCHANGE OF DATA

The level of advancement in information technology in the new millennium is bound to exceed our depth of imagination. This prospect would bring much relief to researchers on two important aspects: data collection and access through electronic exchange of data (EED). The nature, forms, and methods of EED are beginning to get rooted among some researchers in some fields. In the field of education, there is a dire need for promoting such knowledge base and related professional skills among researchers and doctoral students.

The scope of this training session includes: media of EED (platforms, applications, and environments), creation of common data files for EED, retrieval (import) of E-files into a statistical program, transfer (export) of E-files from a statistical program into another application, and retrieval of E-files from a specific format (e.g., PDF, WWW) into a statistical program. This session aims to achieve the following. Participants will (1) understand the differences among EED media, (2) learn how to create a data file for EED, (3) understand the procedures in EED among applications, and (4) know about many Websites for EED for research. Ideally, this training session should be conducted in a media classroom where each participant will have access to a PC. The participants followed the instructor's demonstration and accumulated hands-on-experience. An alternative was a demonstration format in which the instructor demonstrated the procedures using a laptop and a video projector also be used in the workshop format. Each participant received a detailed (--similar to, for Dummies ...) instruction for each of the procedures covered. The session is mainly designed for graduate (doctoral) students and junior faculty.

10:00 a.m.-10:50 a.m. **HIGHER EDUCATION**
Session T#006 (Discussion Session)... **Salon A**

PRESIDER: Chad Ellett, Louisiana State University

CHARACTERISTICS OF UNIVERSITY FACULTY WHO PARTICIPATE IN CLASSROOM RESEARCH

Michael F. Burnett and Julia Y. Porter, Louisiana State University

Quality educational experiences are more important today than ever. Improvements in education require systematic examination of effectiveness of current and proposed practices. Relatively little research has been conducted on interactions in classrooms, especially in universities. This is due largely to difficulties associated with getting faculty to participate in research. Therefore, the purpose of this research was to determine factors that influenced university faculty to participate in classroom research.

The population was teaching faculty in one university during spring 1999. A random sample of courses offered was used to select the faculty sample. The sample included a total of 84 faculty.

The instrument was a researcher-designed recording form. Variables measured were selected based on information from literature and were reviewed for content validity by a panel of experts. Data were collected during the spring 1999 semester using various contact methods as well as recording selected faculty and course demographics.

Of the 84 faculty selected, five were assigned to courses that were canceled, 32 participated in the study, and 47 did not participate. Variables on which the participants and non-participants differed most were the number of personal contacts made, number of telephone calls made from the researchers, and number of students enrolled. A discriminant model was found that significantly increased the researchers' ability to classify subjects on whether they participated. This model accurately classified 85% of subjects.

Implications included making information available to researchers regarding techniques and factors that could enhance faculty participation in research studies. Among these issues were the value of making personal contacts, optimum number of productive telephone calls, and administrative units that were most likely to require more intensive contact methods to gain participation.

UTILIZING NETWORKED COMPUTER WORKSTATIONS TO CONDUCT ELECTRONIC FOCUS GROUP SESSIONS

Catherine Lowery and Kathy K. Franklin,
University of Arkansas at Little Rock

During the spring semester 1999, the researchers conducted a study exploring faculty attitudes about the use of technology in the college classroom. The data collection method chosen for this naturalistic study was a series of "electronic" focus group sessions with faculty from a metropolitan university located in the southwest. The electronic sessions were conducted in a decision-support center located on campus equipped with 13 networked-PC compatible computer workstations, one server, and a facilitator workstation. The software used for the focus group sessions was Group Systems version 2.0 by Ventana Corporation headquartered in Tucson, Arizona. This software is specifically designed for group decision-making, problem solving, and brainstorming activities.

At the beginning of each focus group session, the facilitator explained the technology to participants and how to respond to questions via the computer. After a brief practice session using the technology, the facilitator engaged in a guided-question and answer process using a predetermined focus group script via the facilitator workstation. The guided process included two phases. In the first phase the facilitator posed a question to the group. Individually, the participants responded to each question via the computer. In the second phase, the facilitator "opened" the network to allow all participants to read all responses. Then, through networking, the participants were asked to "talk" with each other about the responses. A printed transcript from each session was analyzed utilizing a content analysis procedure.

The purpose of this presentation was to share the experiences of the researchers in utilizing electronic focus groups to collect data and discuss the unique challenges in analyzing data. Furthermore, the researchers addressed the qualitative issues related to reliability and validity with this collection technique and identified the implications of using electronic focus groups to future qualitative research.

FOSTERING RESEARCH BY FEMALE GRADUATE STUDENTS THROUGH MENTORING

Nicola Conners, The University of Memphis, and Kathy K. Franklin,
University of Arkansas at Little Rock

Evidence in the literature suggests that women are less likely than men to be involved in research activities (Chronister, Gansndeer, Harper, & Baldwin, 1997). Feminist researchers postulate that an increase in research mentoring might encourage more women to participate in research activities (Leibenluft, Dial, Haviland, & Pincus, 1993). Furthermore, researchers argue that female graduate students have different mentoring needs as compared with their male peers.

During the summer semester 1997, six female graduate students participated in a qualitative research methods course specifically designed to facilitate peer and instructor research mentoring. The purpose of this study was to explore the experiences of the six female graduate students as related to the qualitative research course, to explore the attitudes of these women about graduate scholarship and research, and to construct a theoretical framework on female research mentoring.

The data collection phase of the research included three methods: (1) telephone interviews during the semester following the class, (2) e-mail interviews one year later, and (3) a follow-up focus group session with five of the six graduate students 18 months after the class. The researchers used a content analysis protocol by first manually coding the data, then developing the attitude themes and patterns, and, finally, constructing the framework from the attitude patterns. A "member check" of the resulting theoretical display was conducted by participants in the study and by female graduate students not enrolled in the course.

The theoretical framework identified four constructs related to research by female graduate students. Those constructs included (1) overarching research barriers, (2) time management concerns, (3) perceived gender differences that influence research production, and (4) obstacles to research because of family commitments. The framework also identified the mentoring solutions for each of the constructs and the benefits of the qualitative research class as related to those solutions.

10:00 a.m.-10:50 a.m. **MULTICULTURAL EDUCATION**
Session T#007 (Discussion Session) .... **Salon B**

PRESIDER: Linda T. Coats, Mississippi State University

THE EFFECTS OF PERSONAL LIFE EXPERIENCES ON THE ATTITUDES OF TEACHERS TOWARDS CULTURAL DIVERSITY

Amany I. Saleh, Arkansas State University, and Candace Lacey,
Barry University

This study examined the effects of teachers' diverse life experiences on their attitudes towards different diverse ethnic groups in their schools. The study also investigated if students' cultural attitudes varied significantly in relation to the degree of their exposure to diversity in their current university settings.

Questionnaires were distributed to teachers enrolled in a graduate program at a mid-southern university. The classes were randomly selected by the researchers. The sample consisted of 100 participants. Two questionnaires were utilized; the first one was developed by Corporate Diversity Strategies, Inc., and is titled "Assessing MY Own Life Experiences," and the second questionnaire is called " Ethnic Attitude Test," developed by Roger Martinez (1987). The first instrument consisted of a one-page scale survey that enabled participants to assess their multicultural life experiences. The second instrument asked participants to indicate the extent of their agreement with 40 statements regarding ethnic and cultural issues. These statements probed participants for their attitudes concerning different cultures, ethnic stereotypes, and cliches, self-determination rights of minorities, and the role of teachers, ethnic leaders, and parents in educational programs planning. The data were analyzed using SPSS.

The results indicated significant effects of previous multicultural experiences and exposure to cultural diversity on teachers' attitudes towards ethnic groups. The study provided insights into how teachers think and feel about multicultural issues and their diverse students. The results can provide educators and administrators with a new understanding of the effects of perceptions of cultural attitudes among majority and minority group members.

TEACHER EDUCATORS' ROLE IN PROMOTING THE TENETS OF MULTICULTURAL EDUCATION

Pamela A. Taylor, Mississippi State University

The next century is promising dramatic demographic changes, not only in our public education classrooms, but our university classrooms. It has been contended that an influx of different culture groups into the classroom will challenge teachers with how they should best be taught. Preservice and beginning teachers often talk of the importance of being able to respond to the diverse backgrounds, experiences, abilities, and interests of their soon-to-be students, yet, few understand or are prepared for the diversity that awaits them. Traditionally, teachers have been trained and prepared to work with children from the dominant cultural group. However, living in a diverse society requires having an awareness and understanding of the cultural differences not only of the majority, but also the minority culture groups.

One implication of this diversification shift is the challenge it poses to the academy that trains the teachers. Teacher educators have been charged to matriculate teachers who are both culturally sensitive and culturally literate. The issue of multicultural education is so important

that the primary accrediting agency, the National Council for Accreditation of Teacher Education, has encouraged its inclusion in studies for prospective teachers. Even more important, NCATE is revising its standards to place more emphasis on diversity issues and is making the standards more explicit.

Teacher educators play a vital role in the professional development of preservice teachers, in that they design, implement, and assess curricular programs. If preservice teachers are to become culturally sensitive and literate, it will be because of the efforts of teacher educators. It was, therefore, the proposition of this paper to pose a charge to teacher educators to assume a more definitive role by modeling multicultural teaching practices and the tenets of multicultural education. As a result, they will be the exemplars that preservice teachers will strive to emulate.

DO WE NEED A MULTICULTURAL CURRICULUM?

Debra L. Williams-Carter, Mississippi State University

As we look around our communities, we see European Americans, African Americans, Asian Americans, and Native Americans, to name a few culturally diverse groups. From observation, we can see that America is composed of many people from a variety of backgrounds and cultures. Regardless of cultural differences, many of these people make valuable contributions to our society and will continue to do so in the future. Many of our offspring will make contributions and decisions that will dramatically affect our country.

Advocates of multiculturalism are concerned with how teachers are providing instruction for the diverse groups of children in their classrooms. Teachers are being held accountable for meeting the needs of all children in their classrooms, regardless of cultural differences. Therefore, teachers need a curriculum that incorporates diversity and makes allowances for the diverse groups of students that they teach.

Demographic information clearly indicates that America comprises a mixture of people from many culturally-diverse groups. An education centered around one particular group is highly inappropriate. The contributions of all groups must be incorporated into the curricula designed to prepare our students for their futures.

The children in our classrooms today will be the future leaders of tomorrow. It is inevitable that they will have to work with culturally different people for the duration of their lives. Considering this fact, our children need to be taught about other cultures. As responsible adults, we must prepare our children for the tasks they will encounter in the future. Therefore, it was the position of this paper to persuade educators to embrace the idea of multiculturalism. As a result, educators should be inspired to devise curricula that will provide a multicultural education for all students.

10:00 a.m.-10:50 a.m. **AT-RISK STUDENTS AND EARLY CHILDHOOD EDUCATION**
Session T#008 **(Discussion Session)**.. **Salon C**

PRESIDER: Arlene Amos, Choctaw County (MS) Department of Education

PRESERVICE AND INSERVICE TEACHERS' PERCEPTIONS ON SKILLS OF SCIENCE TEACHING IN PRIMARY GRADES

Indranie Dharmadasa, Chicago State University

Research that emphasizes preservice and inservice teacher's perceptions on knowledge about skills of teaching science in primary grades, specifically regarding African

American teachers, appears to be scarce. The purpose of this study was to identify the perceived knowledge of African American preservice and inservice teachers' skills of science teaching and to identify the skills perceived as most knowledgeable and as least knowledgeable by the two groups.

Forty-one inservice and preservice teachers from an early childhood program in a mid-west university participated in this study. The perceptions on skills of science teaching were gathered using a five-point,Likert-type scale. One way ANOVA design was applied to analyze data.

Results showed a statistically significant difference between the two groups of teacher's in perceived knowledge about science teaching skills. Preservice teachers perceived that they had little knowledge in most of the skills, while inservice teachers perceived they had considerable knowledge in all of the skills. Both preservice and inservice teachers perceived that "using hands-on approach to teaching and learning" as one of the two most knowledgeable skills and "developing lessons to include a variety of strategies" as one of the two least knowledgeable skills. Inservice teachers perceived "using effective questioning," and preservice teachers perceived "designing activities to develop metacognition" as the other most knowledgeable skills of science teaching while preservice teachers perceived "organizing and sequencing instruction" and inservice teachers perceived "developing clear instructional objectives" as the other least knowledgeable skills.

Inservice and preservice teachers' perceived that knowledge about science teaching skills would provide useful feedback to teacher education programs regarding the extent to which early childhood, African American preservice and inservice teachers need to be equipped with necessary knowledge and skills to meet the demands of science teaching in primary grades.

EFFECT OF THE HIPPY PROGRAM ON DEVELOPMENT OF LITERACY SKILLS

Susanne MacGuire and Glennelle Halpin, Auburn University

In an attempt to make an early impact on school achievement, one school chose to provide the Home Instruction Program for Preschool Youngsters (HIPPY) for their most at-risk kindergarten children. In this school, where 96% of the children qualify for the Federal Free Lunch Program, 20 children representing the lowest performing 25% on the Alabama Kindergarten Assessment and their families were invited to participate over the course of the kindergarten year. The HIPPY program is a structured compensatory education program that is delivered to the child by the mother who is trained on a weekly basis with the current set of materials.

Research on HIPPY suggests that participation in this program may have an impact on later math achievement, but the influence on literacy skills looks much less promising. The focus of this study was a fine-grain analysis of the children's emerging literacy skills in an attempt to understand how the program was impacting this area of development. Twelve program children and six comparison children were followed over the course of the eight-month program. Literacy skill development was assessed with the Clay Observation Survey of Early Literacy Achievement and the Test of Phonological Awareness. Of particular interest were the children's own theories about reading and writing. Information regarding each child's theories was gained through a semi-structured interview in a play setting where the child was teaching a teddy bear to read and write.

Changes in literacy skills were examined for each child in both groups and compared across groups. Child interview tapes were analyzed for individual theories about reading and writing and compared for common and unique themes and changes over time. Implications for use of this program as compensatory education at the kindergarten level were discussed.

The overall exposure to a traumatic death experience appeared not to impact an individual's world assumptions. Counselors may wish to focus more on the age the exposure to the traumatic death occurred, relationship to the deceased, and social support of family members than on the fact of the exposure to the traumatic death experience.

GENDER AND PERCEPTIONS OF SEXUAL ASSAULT OF MEN

James Meadows and Katherine Dooley, Mississippi State University

The study examined the relationship between gender and perceptions about the sexual assault of men. Previous literature explored perceptions of the sexual assault of women. The research indicated that men held more stereotypical perceptions about the sexual assault of women.

This pilot study was used to develop the instrument that assessed participants beliefs about the sexual assault of men. In this study, 74 graduate students (67 women and 7 men) in counseling participated in the study. Ages ranged from 21 to 57 years.

The questionnaire was developed from the work of Coxell and King (1996) and Gonsiorek (1994), who discussed the types of stereotypes about the sexual assault of men that were commonly held. The instrument contained items that assessed stereotypes about whether persons who assaulted males were gay or whether gayness was a contributing factor in the sexual assault of men. Items also focused on whether men could be forced to have sex against their will. Other items focused on the psychological and physical consequences of the sexual assault on men.

Results of the study indicated that participants, regardless of gender, disagreed that being gay was a major factor in the sexual assault of men. Further, the majority of the participants indicated that sexual arousal did not imply consent in a the sexual assault of a man. Participants differed on the question of whether men could be compelled to have sex against their will. More men than women believed that men could be forced to have sex. Finally, the participants were in agreement that the effects of the sexual assault on men were traumatic. The authors concluded that these results could not be generalized to other groups because of the biased nature of the sample. The type of participants, counseling students, and small number of men created selection bias.

A follow-up study of this topic involving a larger and more diverse sample was conducted with the original instrument. The results of that study were also shared in the discussion.

CRISIS SITUATIONS AND THE COUNSELING SUPERVISOR

Ying (Lisa) Tang and Katherine Dooley, Mississippi State University

This study examined trainees' perceptions of the supervisory relationship and whether the supervisor's level of confidence influenced the trainee's level of confidence in dealing with a crisis situation.

The participants in the study were counseling students enrolled in school-based practica and internships in masters' programs throughout the United States. Questionnaires were distributed to 70 master-level programs in school counseling listed in the 1999 Directory of CACREP accredited programs with. Of the 350 questionnaires distributed, 74 usable questionnaires were returned. Participants included 60 women and 14 men.

The questionnaire was a self-report instrument with 22 items. The first section contained items that asked the trainee to assess her/his comfort in dealing with a school crisis. The second section asked the trainee to evaluate her/his relationship with her/his supervisor. The final section consisted of three vignettes in which the trainee was asked to determine her/his level of confidence in dealing with the scenario, and her/his perception of a supervisor's level of confidence in dealing with the same scenario.

Analysis of the data indicated a significant relationship between the trainee's satisfaction with the supervisory relationship and her/his confidence in dealing with a crisis in the school. Further, the relationship between the trainees' confidence and her/his confidence in their supervisors was significant.

10:00 a.m.-10:50 a.m. MATHEMATICS AND SOCIAL SCIENCE
Session T#010 (Display Session).. Salon E

CHILDREN'S HEROES AND HEROINES: DEVELOPING VALUES MANIFESTED THROUGH ARTWORK

Judy H. McCrary, Jacksonville State University

This research focused on kindergarten-age children's perceptions of heroes and heroines. Heroes and heroines are defined as people whose qualities are admired by fellow members of a social group. Heroic qualities are dependent upon the social values and perceptions of a particular time and place. The major objective of this research was to assess the personal values of this group of children.

The influence of mass media, children's access to a new and unbridled "cyberspace," the high rate of divorce and children without responsible fathers, the persistence of drug abuse and poverty, the upsurge in violence committed by children - these changes are reflected not just in the violent extremes of teenage behavior but in the everyday speech and actions of younger children as well. These are reflections of personal values.

This display was significant in that it demonstrated how the artwork of children could be used in the assessment of children's personal values, thereby enabling children to sort out thoughts and feelings that reflect personal values. Teachers are also enabled to determine which values need to be developed and encouraged.

This study involved 17 kindergarten children. Children participated in a classroom discussion of heroes and heroines. Each child then drew a picture of her/his hero or heroine. The researcher analyzed the artwork of each child and determined the outstanding values represented by the hero or heroine. A parallel was then drawn between the values of heroes and heroines and this group of children's developing values.

A NEW WAY OF PROVING EUCLIDEAN GEOMETRY THEOREMS

Rhonda Catina Porter, Auburn University

High school geometry classes have received much negative feedback for their use of two-column proofs to prove Euclidean geometry theorems. Not only is this task difficult for students, it is also laborious for teachers when it comes to grading students' work. In addition, the National Council of Teachers of Mathematics Standards Committee recommends decreasing the emphasis on two-column proofs. Thus, the researcher presents an innovative way to teach students to prove Euclidean geometry theorems algebraically. This new method allows students to take advantage of the great benefits of technology and to bring a new and exciting component to geometry class. Consequently, it provides a universal process for generating the validity of Euclidean geometry theorems.

Wu, a Chinese mathematician, developed an algebraic method for proving Euclidean geometry theorems. This method requires the use of technology and minor programming skills. With technology being so popular in today's classrooms, students and teachers experience the excitement of this new way of proving Euclidean geometry theorems. The technology must be capable of doing basic math operations on multivariable polynomials.

Wu's method entails three steps: (1) writing the hypotheses and the conclusion of the theorem in polynomial form using the coordinates of given points and setting each equal to zero, (2) putting the hypotheses in triangular form, and (3) performing pseudodivision of the conclusion by each of the hypotheses. If the remainder is zero, then it can be concluded that the conclusion(s) of the theorem follows from the given hypotheses.

The attendees viewed three examples of the process being applied to theorems and by receiving support materials such as the proof of the Wu's method, a lesson plan utilizing Wu's method, and a current reference list of research done on algebraic theorem proving.

COMPARISON OF THE BEHAVIORAL MOMENTUM TECHNIQUE AND THE INTERSPERSAL TECHNIQUE ON SIGHT WORDS WITH A FIRST-GRADE STUDENT

Katrina N. Rhymer, Kristina L. Dalme, T. Steuart Watson,
and Christopher H. Skinner, Mississippi State University

A seven-year-old boy in first grade was referred by his teacher because of poor ability to read sight words. The behavioral momentum technique and the interspersal technique were implemented in order to compare accuracy and time completion for both procedures. The behavioral momentum technique consisted of a series of three known words followed by one unknown word. The interspersal technique consisted of three unknown words followed by one known word.

Four lists of 20 sight words each were constructed: Behavioral Momentum (List A), Interspersal (List B), Control (List C), and Probe (List D). The results suggested that the learning rate for the interspersal technique was slightly higher than the learning rate for the behavioral momentum technique. Data on the control set of words and the probe set of words indicated that some spill-over from interventions and the natural environment occurred.

THE FENNEMA-SHERMAN MATHEMATICS ANXIETY SCALE: RELIABILITY AND EXPLORATORY FACTOR ANALYSIS

Gary L. Cates, Mississippi State University

The Fennema-Sherman Mathematics Anxiety Scale (MAS) has been used for various assessment purposes related to students' anxiety of mathematics. Although the MAS has been utilized in many fashions, limited research on the psychometric properties of the instrument has been carried out. This paper examined data collected from 102 college students. A reliability estimate was obtained, and an exploratory factor analysis was conducted. Results suggested high reliability and a one-factor solution. Discussion focused on both the current study's consistency and inconsistency with earlier research as well as directions for future research.

10:00 a.m.-10:50 a.m. **COMPUTER EDUCATION**
Session T#011 **(Training Session Continued).. Salon F**

TRAINER: Gunapala Edirisooriya, East Tennessee State University

TRICKS AND TREATS OF ELECTRONIC EXCHANGE OF DATA

The level of advancement in information technology in the new millennium is bound to exceed our depth of imagination. This prospect would bring much relief to researchers on two important aspects: data collection and access through electronic exchange of data (EED). The nature, forms, and methods of EED are beginning to get rooted among some researchers in some fields. In the field of education, there is a dire need for promoting such a knowledge base and related professional skills among researchers and doctoral students.

The scope of this training session included: media of EED (platforms, applications, and environments), creation of common data files for EED, retrieval (import) of E-files into a statistical program, transfer (export) of E-files from a statistical program into another application, and retrieval of E-files from a specific format (e.g., PDF, WWW) into a statistical program. This session aimed to achieve the following. Participants will (1) understand the differences among EED media, (2) learn how to create a data file for EED, (3) understand the procedures in EED among applications, and (4) know about many Websites for EED for research. Ideally, this training session should have been conducted in a media classroom where each participant would have had access to a PC. The participants followed the instructor's demonstration and accumulated hands-on-experience. An alternative was a demonstration format in which the instructor demonstrated the procedures using a laptop and a video projector. This can also be used in the workshop format. Each participant received a detailed (--similar to, for Dummies ...) instruction for each of the procedures covered. The session was mainly designed for graduate (doctoral) students and junior faculty.

11:00 a.m.-11:50 a.m. **PERFORMANCE ASSESSMENT - PORTFOLIOS**
Session T#012 (Discussion Session)..Salon A

PRESIDER: Ernest A. Rakow, The University of Memphis

PORTFOLIO ASSESSMENT AS SUMMATIVE DOCUMENTATION IN A TEACHER PREPARATION PROGRAM

Laura J. Hopfer, The University of Tennessee, Knoxville

This teacher education program examined performance assessment through the implementation of reflective portfolios as summative documentation for examining and evaluating specific aspects of learning during a two-year program. Guidelines for assessment were based on 31 frameworks for individualizing instruction developed as a means of improving learning and creating schools in which all students can learn.

Ten preservice teachers (interns) training at the K-8 level comprised the initial sample. Interns were responsible for collecting evidence and reflecting on their growth and mastery of teaching abilities during a two-year teacher training process. A primary focus for this portfolio was the implementation of the program's 31 frameworks. Monthly group meetings were held to discuss progress with implementation and as a means to promote personal assessment and reflection upon improvement. Interns were responsible for selecting and assembling documentation and artifacts that indicated their level of understanding and personal ability to appropriately implement the frameworks. A rating rubric was developed that specifically identified and ranked the criteria for assessment.

Interns showcased their portfolios before an interview panel composed of education administrators from the local public schools and/or the university. All members of the interview board individually rated the interns' presentation. These were tallied for overall score and placement on rating scale. All interns demonstrated a heavy focus on the specific classroom techniques guided by the 31 frameworks and broad-ranged reflections indicative of their classroom teaching abilities and personal success.

The interns demonstrated a high level of framework implementation, increased comprehension levels, realistic reflection, and the ability to communicate knowledge of their learning. Their portfolios documented personal growth and abilities in a beneficial format that may be expanded or adapted to include job readiness assessments, professional development opportunities, and interview materials.

PORTFOLIO: ONE SCHOOL'S JOURNEY

Melanie J. Kennon, Arkansas Tech University

This qualitative study examined teacher perceptions longitudinally to determine what resources were necessary for successful implementation of portfolio assessment. The study focused on current perceptions about portfolios along dimensions such as usefulness with different populations and for various purposes, time efficiency factors, and the infusing of this new assessment form into a traditional assessment model.

The study included all 11 faculty at a small, rural elementary school. Throughout the study, teacher attitudes about the concept of authentic assessment and factors that they identified as inhibiting or promoting successful implementation were gathered using surveys, focus groups, and informal interviews. Descriptive information about the process of implementation in K-6 classrooms was collected from monthly meetings and frequent individual discussions with teachers as they struggled to implement portfolios.

Teachers identified both positive and negative aspects of implementation of the new assessment system. Negative aspects or obstacles included : (1) lack of time for learning, for data collection, for conferencing, and for designing rubrics and performance tasks; (2) reconciling portfolio assessment and rubrics with traditional testing and grading practices; and (3) the necessity of changing traditional classroom roles and instructional methodologies to better fit a performance-based system of assessment. Benefits of portfolio implementation included: (1) improvements in student self-esteem and a sense of ownership and pride in their own learning, (2) a fuller picture of students' capabilities, (3) increased professional collaboration with colleagues, and (4) changing views of themselves as researchers and facilitators of learning representative of a child-directed classroom environment.

Systemic assessment reform is a complex process that must involve listening carefully to stakeholders as they move through the process and enduring the growing pains necessary to enact such reform. Bridging the chasm between portfolio assessment and authentic instructional practices will require much in the way of resources, professional development opportunities, and time.

PRESERVICE TEACHERS' ATTITUDES TOWARD PORTFOLIO ASSESSMENT: AN EXPLORATORY STUDY UTILIZING A PROJECT PORTFOLIO

Mary Ann Robinson, University of South Alabama

This study examined preservice teachers' attitudes toward portfolio assessment when using a project portfolio as an alternative to traditional tests. Specifically, it investigated their beliefs regarding the amount of work involved, amount of learning that occurred, individual learning needs, student-teacher involvement, individual assessment, integration of skills, pacing, and evaluation preferences.

The subjects (n=66) were education majors (12 males, 54 females) enrolled in four sections of a computer course. They were mostly juniors and seniors with a mean age of 24 years who had little or no prior experience with portfolio assessment.

The course instructor taught one semester (16 weeks) of computer applications including use of the Internet and Microsoft Office 97. The subjects were given criteria checklists for all sections of the project portfolio with freedom to select the project of their choice. In addition to class sessions, the instructor met with the students individually and as groups throughout the semester to provide guidance and feedback. The students were allowed to revise their work prior to final submission.

Throughout the semester, the instructor kept a log that included observational data recorded during class and laboratory practice sessions and student conferences. At the end of the semester, the subjects completed a 14-item portfolio assessment questionnaire designed specifically for this study. The data were analyzed, and percentages were computed and displayed in a table.

The results indicated support for practitioners in the use of project portfolios as authentic assessment tools and provided support for further research in the use of portfolios in the college classroom, particularly with cumulative skill acquisition. Special considerations for instructors such as the time factor in grading and conducting student conferences were noted.

11:00 a.m.-11:50 a.m. **SCHOOL VIOLENCE**
Session T#013 (Discussion Session).. **Salon B**

PRESIDER: Joe Licata, Southeastern Louisiana University

TARGETING STUDENTS FOR VIOLENCE PREVENTION PROGRAMS

Connie A. Jones, Middle Tennessee State University

This paper was designed to present conclusions that support targeting students who demonstrate the potential to commit acts of violence for programs that focus on limiting aggressive behaviors. It was proposed that students who commit violent acts at school could be identified and helped. While school districts have been developing and implementing Safe School Plans, many violence prevention initiatives have been unavailable until violent acts have been committed. Counseling has been available for students who survive or witness violent acts at school. Few ,if any, programs have been available for potential perpetrators prior to the commission of a violent act.

Aggressive students who demonstrate the characteristics of serious or chronic juvenile offenders can be identified if educators are trained to know the signs to look for. If these students were targeted and appropriate measures taken, the likelihood of their involvement in the some violent act can be lessened. Successful violence prevention initiatives have lowered the number of violent acts being committed in specific areas of the country.

The profile of potentially violent students was presented in the paper. Children at risk for aggression and violence have been found to behave cognitively and socially differently from their more socially competent peers. Early childhood has increasingly been recognized as a key stage in the development of aggressive, violent behaviors. It was, therefore, recommended that the earlier the potentially aggressive or violent child is identified the greater the possibility of decreasing the likelihood of their involvement in the commission of a violent act.

Educators cannot do this alone. Teachers, classmates, parents, principals, and other significant adults should be responsible for identifying aggressive, potentially violent children. Many successful programs designed to remediate aggression and violent tendencies have a home- or community-based component. These joint efforts address concerns for the development of the whole child.

VIOLENCE IN THE SCHOOLS--A LITERATURE REVIEW

E. Jean Newman, University of South Alabama

The literature review is part of a greater research endeavor in a survey of school counselors related to prevention and interventions for school violence. The review is designed both for research documentation and as background for inservice or reports to local schools, inasmuch as many university persons will inevitably be called on for such assistance.

The search covered books in print, Psychlit, ERIC, and internet keyword search. Over 100 references (of over 800) were cited and referenced in the paper. Categories included prevention strategies, crisis management team formation, administrative hierarchies used and/or advocated, parent involvement, media relations, crisis counseling plans, and issues. The issues ranged from metal detectors and no-locker schools, to the more esoteric questions like "Can you really predict which students will turn violent?"

The implications of this research apply to several arenas, at several levels. Areas that may be useful for educators, researchers, administrators, counselors, and others include: organizational structure; communication lines; student factors such as behaviors, class size, academic vigilance, extracurricular activities, and social activities; parent and family involvement; counseling needs for the school, individuals, faculty, and families; continued networking with other consultants (therapists, nurses, school law officers, social workers, school psychologists); and building communications, both formal and informal, among faculty and staff. Finally, implications strongly suggested the necessity of having crisis plans in place, including city and county health, fire, police, and emergency agencies.

In relation to school violence and related crises, accurate information must be offered, along with the best that theory and practice advocate in relation to human development, the characteristics of groups, sound practice in education and school management, and meeting the needs of our communities at the social, cognitive, affective, and psychological levels. This review of literature offers a beginning to face this myriad of challenges.

A REVIEW OF LITERATURE FOR THE TEACHING STUDENTS TO BE PEACEMAKERS PEER MEDIATION PROGRAM

Trey J. Fitch and Jennifer L. Marshall,
Morehead State University

Conflict that is not successfully resolved leads to violence, learning impediments, and administrative difficulties. From the 1984-94 the homicide rate for adolescents doubled. Homicide ranks as the third leading cause of death for children 10-14 years of age. As a result of the prevalence of youth violence there is a greater need for peer mediation programs in schools. The Teaching Students to be Peacemakers program was developed to reduce the incidence of violent acts committed in the school environment.

This review of the literature examined the effects of an elementary, middle, and high school peer mediation program. The Teaching Students to be Peacemakers Program (TSPP) was identified as a evidentiary-based conflict resolution program. The review attempted to outline the following: (1) the implementation of the program, (2) outcome research regarding the program, and (3) the current utilization of the program.

Studies were selected based on their inclusion of outcome based measures of program effectiveness and their display of program goals and procedures. This review was conducted to support an application for a School Action Grant to be implemented in a rural Kentucky school district.

The findings of the review indicated the following: (1) the longevity of TSPP provides face validity for the program, (2) the program has more support from outcome research than most peer mediation programs, and (3) the comprehensive nature of the program is one of its primary strengths.

One implication of this review was that TSPP represents a well-researched choice for school districts seeking a peer mediation program. Second, TSPP is structured and systematic. Consequently, it can be implemented efficiently into the schools existing curriculum. Third, the program supports pro-social skills for all students by rotating students as peer mediators.

11:00 a.m.-11:50 a.m. COGNITION AND LEARNING
Session T#014 (Discussion Session).. Salon C

PRESIDER: Edith A. Miller, Auburn University

THE EFFECTS OF QUESTIONS AND ANXIETY ON ATTENTION, QUESTION CONFIDENCE, AND METACOGNITION

Daniel Fasko and Ronald Skidmore,
Morehead State University

The effects of questions of different cognitive levels were investigated in four undergraduate classes. Previous research suggested that questions may distract students from a lecture and that students felt more confident about responding accurately to low order questions (LOQ). It was speculated that perhaps anxiety interfered with students' confidence to respond to higher order questions (HOQ) and students' metacognitive and attending behaviors.

Eighty students (50 female and 30 male) in two each upper- and lower-division undergraduate educational foundations courses were surveyed. The four undergraduate classes were block randomized into groups receiving HOQs, LOQs, 50% HOQs and LOQs, or no questions (NQ). Standardized lectures on assessment, approximately 30 minutes in duration, were given to the HOQ and LOQ groups, while the 50% and NQ groups received lectures on intelligence. Except for the NQ condition, the HOQs and LOQs were placed into the lecture where appropriate.

One week prior to the specific lecture, a vocabulary test and four subscales of the Motivated Strategies for Learning Questionnaire (MSLQ) were given to the students. On a subsequent day, each class received their respective lecture. Prior to the start of the lecture a test packet, including the Worry-Emotionality Scale (WE), an attentiveness inventory (AI), and a question confidence scale (QC) was provided to the students. Before and after the lecture the students completed the WE scale. Students in the question conditions were instructed to rate their confidence to respond to questions asked during the lecture. Students in the NQ group were instructed to summarize the lecture material. The AI scale was completed at the end of the lecture. One week later each class was given an achievement test that included either HOQs or LOQs relevant to the lecture they received.

Multiple regression analyses were conducted. Implications for future research and practice were discussed during the presentation.

MIDDLE SCHOOL STUDENTS' UNDERSTANDINGS OF MEANINGFUL LEARNING AND ENGAGING CLASSROOM ACTIVITIES

Nancy Ares, Jeffrey Gorrell, Rhonda Porter, and Joe Ross,
Auburn University

This study centered on middle school children's perceptions of the conditions that foster their meaningful engagement in classroom learning. Interviewed were 108 (52 individually and 66 in focus groups) students in five middle schools in south Louisiana concerning their successes in school, the activities that they enjoyed, the nature of their learning experiences, and the conditions under which they felt most involved and engaged in meaningful learning. These students' 26 classrooms observed an average of three times each, and the 26 teachers concerning student motivation and engagement were interviewed. These supplementary sources of data provided contextual information about the students' classes, as well as confirmatory or disconfirmatory evidence related to the students' perceptions of their classes and their teachers.

Careful theme analysis of interviews showed that middle school students were able to distinguish between those classroom settings and activities that contributed to meaningful learning and those that did not. Valuing learning, they had accurate understandings of what constitutes meaningful rich, active learning activities, and how those activities fostered their engagement in learning. Students felt most engaged when they worked in groups, when teachers involved them in fresh and unique learning experiences, and when they were able to interact with their peers during learning. They perceived restricted movement and interactions in the classroom, strict discipline, and routinized lessons as discouraging and as inhibiting. In classes where students were given more varied learning experiences and opportunities to work in groups, students were observed to be more actively and meaningfully engaged in learning, and they reported learning more while also enjoying the learning experiences. These findings provided important insights from students' perspectives on issues of control in learning, classroom social interaction, and pedagogical techniques that supported meaningful learning.

PIAGETIAN CENTRATION AND EDUCATION: ARE ADULTS FALLIBLE AS WELL?

Gopakumar Venugopalan, The University of Alabama

In his classic conservation experiments, Piaget demonstrated that children often fail to perceive more than one dimension of a conservation task. He called this perceptual limitation, which was shown across diverse tasks involving conservation of mass, volume, area, number, and so on, centration. Piaget's stage theory, and notion of centration, has provoked numerous attempts at disconfirmation. Later researchers have demonstrated that instances of centration are domain-specific, task-specific, and not limited to children. While Piaget originally proposed it as a developmental deficiency in children, adults now seem to manifest a similar phenomenon. However, researchers have tended to describe "adult centration" in terms of attentional limitations and thereby distinguish it from developmental centration. I contend that the same phenomenon is manifesting itself in both children and adults and, therefore, the same explanation must apply to both.

The problem with education today is one of "centration" or "attentional blindness." Educators and educational systems randomly choose one or more areas to receive attention and encouragement, at the expense of others. This has conferred a unidimensional status on education, removing from it a more contextualized learning. This position paper was

supported by the substantial body of literature drawn from developmental, cognitive, and experimental psychology, and the philosophy of education.

11:00 a.m.-11:50 a.m. **ACHIEVEMENT AND POLICY**
Session T#015 **(Discussion Session)**.. **Salon D**

PRESIDER: Scott Bauer, University of New Orleans

COMPARING CONTENT AREA ACHIEVEMENT IN ALGEBRA, BIOLOGY, AND U.S. HISTORY: SHORT-TERM PRIORITIES AND LONG-TERM CONSEQUENCES

John G. Thornell and J. Reid Jones, Delta State University

Standardized achievement tests (e.g., the ITBS or SAT) usually sample broad skill areas such as mathematics, reading, and language. This approach measures the cumulative impact of student experiences in all prior grades. By comparison, achievement tests in specific content areas such as Algebra I, Biology, and U.S. History primarily sample a single year of school. Such content area tests are considerably more likely to reflect short-term priorities of the school district. Further, scrutiny of these area tests allowed the authors a sadly unique opportunity to directly study achievement in U.S. History.

Content area tests for Algebra I, Biology, and U.S. History are annually published for the 152 school districts in Mississippi. History and biology results were more closely associated (r=.81) than with algebra results (r=.70 in both comparisons). Because history scores were a primary interest for the authors, further study was directed at variables influencing that score. Forty-nine of the 152 districts were identified where the standardized history score was highest among the three content area tests. Surprisingly, MANOVA showed that these 49 districts scored lower on Algebra (p<.01) and approached being significantly lower on biology (eap=.068). The study of 15 other variables showed that these districts were more likely to be small, rural, and economically depressed. Such districts were less likely to be influenced by state and national priorities placed on mathematics and science.

It was obvious that districts that performed best on history would not necessarily be poor in mathematics and science. However, it was equally obvious that more progressive and prosperous districts did not have to sacrifice content areas such as history in the service of promoting technology in the curriculum. Discussion focused on long-term consequences of these trends.

THE DESEGREGATION EXPERIENCE OF PUBLIC SCHOOL PERSONNEL IN EAST BATON ROUGE PARISH, LOUISIANA

Douglas R. Davis, Louisiana State University

Fall 1970 marked an important change in the East Baton Rouge Parish Public School System. In 1970, the number of desegregated students rose from 3000 to over 40,000. In addition, for the first time, school personnel, buses, and extra-curricular activities were desegregated. Over 600 teachers began the 1970 school year teaching in schools that were previously dominated by another race. This event, known as the "cross-over," is the subject of this paper.

The historical study of the 1970 cross-over in East Baton Rouge focused on three questions: the perceptions of school personnel during the cross-over; the impact of the cross-over on classroom teaching, and community attitudes during the cross-over. These questions were answered through a combination of oral history interviews and an examination of historical documents.

Answers to each question were discussed in detail; however, a common theme emerged in all three answers. The phrase "deeply embedded racial attitudes and stereotypes" was used as a descriptor of the cross-over experience in East Baton Rouge. Deeply embedded racism was defined through a modification of Scheurich and Young's (1997) description of "civilizational racism." Scheurich and Young claim that racism exists, often unknowingly, in the construction of knowledge itself. This argument expanded in this work with the claim that "civilizational racism" is present in the use of all language. The conclusion argues that the oral narratives and the historical record demonstrated problems resulting from embedded racism, particularly through the use of language. As a result, it was recommended that school districts that were developing a desegregation policy also develop an "integration policy" specifically designed and targeted to issues of "deeply embedded racism."

DIFFERENCES AMONG ACCREDITATION LEVELS IN ALGEBRA ACHIEVEMENT OF MISSISSIPPI PUBLIC SCHOOLS

Charles W. Davidson and Jerry R. Lewis,
University of Southern Mississippi

Each year, each school district in Mississippi is assigned to an accreditation level from one to five, with five the highest accreditation possible, according to the number of performance variables satisfied by each school district. However, the socioeconomic level of the parents of the children of a school district is not taken into consideration when assessing school district performance. The purpose of this study was to determine if algebra achievement would be different among the accreditation levels if the school districts were equated on the basis of the percentage of students eligible for free lunch and the percentage of students who take the ACT core curriculum in high school.

The subjects for the study were the 152 school districts in the state of Mississippi. The data were obtained from the 1999 Report on Mississippi's Public School Districts for the 1997-98 school year published by the Mississippi Department of Education. The criterion variable for this study was the scores on the State Algebra I test, which is administered state-wide each year. The predictor variables were: the percentage of students eligible for free lunch and the percentage of students who take ACT core course work. Multiple regression analysis was used to determine the variance accounted for by the two predictor variables. The five dummy variables representing the accreditation levels of the school districts were then entered into the prediction system.

The two predictors in the equation accounted for approximately 42% of the variance in algebra scores. When accreditation levels were entered into the system, the *r*-square change was only .039 (p=.347). The results of this study indicated that accreditation was more a function of socioeconomic level than of learning produced by the various school districts.

11:00 a.m.-11:50 a.m. **TECHNOLOGY AND COMPUTER EDUCATION**
Session T#016 **(Display Session)** .... **Salon E**

MENTAL MODEL CONSTRUCTION: AN INTERACTIVE STRATEGY FOR MENTAL MODEL LEARNING

Susan Dale Mason, University of South Alabama

A "mental model" is a knowledge structure composed of concepts and the relationship between them. A mental model is a systemic type of learning outcome - a system of information, concepts, and relationships between them.

A mental model learning outcome is distinct from declarative and procedural knowledge, going beyond semantic relationships and skills acquisition to the acquisition of cognitive structures (structural knowledge). Building on the theory base that information in memory is encoded in and retrieved from a structure that preserves meaning, theorists posit mental models as powerful engines for higher order cognitive processes. The mental model enables the learner to solve problems, generate inferences, and make predictions about the system that is modeled. Research with troubleshooting and mental models would suggest another function of mental models learning: predicting what is wrong with a system (troubleshooting diagnosis).

Consequent with the learning theories of constructivism and constructionism, mental models may best be learned when the learner has the opportunity to build the model, not just observe it. Research into computer-based learning indicates that learners understand and retain information better when they interact with it so as to encourage elaboration, inference, or other forms of meaningful learning. Model construction forces the learner to compare model components and the relationships between them.

This display presented an example of mental model construction activities: the construction of a pump. Learners must build a model from its disassembled parts, and must assemble the functions of the parts as well. The model is computer-based (Authorware 4.0) and has been tried out with small groups of learners. It includes instruction, model building, and tests. Attendees watched a demonstration, or tried out the program themselves.

TRAINING PRESERVICE TEACHERS TO INTEGRATE TECHNOLOGY IN TEACHING

Sue S. Minchew and Nancy C. Boling, Mississippi State University

The Mississippi Council for Education Technology revealed that few Mississippi schools integrate technology into the curriculum, and few preservice teachers are adequately trained to teach with technology. In response to the apparent need for training in technology integration among future teachers, T.H.E. (Technology in Higher Education) P.R.O.J.E.C.T. (Preparing, Recruiting, Organizing, and Joining Educators to become Competent Teachers) initiative was designed as a program innovation to address the following: (1) the recruitment of future teachers, (2) the technology integration training needs of future teachers based on specific guidelines from NCATE and ISTE, (3) university faculty professional development in technology; (4) socioeconomic, cultural, and technological equity in the training process; and (5) the sharing of technology integration among all educators.

The display included a detailed chart of the model framework showing the plan for involving K-12 teachers, university faculty, and preservice teachers in the training and implementation of teaching with technology. Also displayed were the initial results of a small pilot study resulting from a collaboration between a professor of Educational Technology and a professor of Curriculum and Instruction.

Participants included 15 secondary methods students (12 females, 3 males; 13 whites, 2 African Americans) who were trained to integrate technology in their teaching. Student-produced brochures were displayed along with photographs depicting students' use of technology in teaching simulations. Also displayed were evaluations by university professors and fellow students of the effectiveness of student teaching simulations involving the use of technology; in addition, evaluations by inservice teachers of students teaching with technology in actual classroom settings were shown.

The model framework and results of the pilot project provided implications for classroom practice, teacher educators, and school administrators.

IMPROVING COMPRESSED VIDEO INSTRUCTION BY USING MULTIMEDIA TECHNIQUES WITH SOUNDS, PICTURES, AND ANIMATIONS

J. Gordon Nelson and Franklin King, Jacksonville State University

Compressed video (CV) is an advanced teleconferencing system that allows for the interaction of the instructor with students on and off campus. In January 1997, Jacksonville State University (JSU) established a compressed, video network serving four different locations and offering four graduate courses. During spring 1999, three more sites and several more classes were added. Thus, two years of teaching CV courses provided an opportunity to identify and solve problems unique to successful teaching with this format.

One major challenge in teaching CV courses included the monitoring of on/off-task behaviors of off-campus students. Most CV instructors identified this as their major concern. One solution to the problem was experimenting with multimedia presentations (e.g., PowerPoint). Although this type of teaching was new to both instructors and students, it adapted well to the CV format with off-site students viewing TV monitors.

According to survey data and comments, multimedia presentations were highly effective in teaching CV classes. Students were more enthusiastic, more attentive, and interested in the multimedia-presented lectures. Novelty of presentations may have been a factor; however, it was also observed that instructors were more enthusiastic in their presentations as they shared and improved each weekly lesson. In preparation, instructors explored the Internet for sounds and pictures to concretize and emphasize points in their lessons. As their skills developed, they included animation effects with the drawing toolbar and custom animation menus. Music was also added with CD player and sound recorder in the accessories folder. This method of teaching seemed to appeal to a wider range of learning styles, although visual learners especially benefited. Also, many students plan to use multimedia presentations and are, therefore, intrinsically interested in the technique.

This display presentation shared examples and techniques in developing multimedia presentations for CV courses and typical classroom teaching.

A LONGITUDINAL STUDY OF TECHNOLOGY RESOURCES AND USE AT AN ELEMENTARY SCHOOL

Vivian H. Wright and Margaret L. Rice, The University of Alabama,
and Debra Hildreth, Tuscaloosa City (AL) Schools

This study was a longitudinal case study designed to assess the technological resources and uses of technology at an elementary school. This project is entering its third year. Assessments and interventions have been conducted since the opening date of this new elementary school that opened to students in fall 1997.

The school used in the study is a magnet elementary school located in a city in Alabama. The participants in the study were administrators, faculty, and staff at the school. Assessments were conducted at the beginning of the school year. The same assessments were used at the end of the year. These assessments included: (1) discussions with the principal to develop a summary of technological resources available to teachers and students, (2) administration of a researcher developed instrument called the Media Use Survey, and (3) administration of a researcher developed instrument called the Basic Computer Knowledge Test. Interventions are implemented between the assessments. The session presented an outline of the study, the various instruments used, information about the interventions, and current results of this longitudinal study.

11:00 a.m.-11:50 a.m. STUDENT MOTIVATION
Session T#017 (Symposium).. Salon F

ORGANIZER: Michael H. Crowson, The University of Alabama

IMPLICATIONS OF MOTIVATIONAL THEORY FOR CLASSROOM PRACTICE

Michael H. Crowson, Nadia Elkhamisy, Jesse J. Foster, Ming Lei, and
Jenefer E. Husman, The University of Alabama, and Debbie Ingle Bevill,
State Community College

In recent years, as motivational theory has blossomed, so too has the potential for advancing educators' practical knowledge about motivating their students. Oftentimes, practitioners and administrators view theory as too unwieldy to be easily incorporated into daily practice. Thus, the purpose of this session was to provide a point of departure for consideration of the practical implications of motivational theory and its relevance to educational settings. The authors of the following papers discussed ways in which educators could consider using motivational theory in their daily practice.

Nadia Elkhamisy, The University of Alabama and Debbie Ingle Bevill, State Community College (How Teachers Motivate Students to Intrinsic Self-Regulation) provided a discussion of the ways in which principles of self-determination theory may be used to encourage self-regulated learning in students. Jesse J. Foster, II, The University of Alabama (Integration of Technology into the Classroom: A Discussion of Self-Efficacy and Perceptions of Utility Among Teachers) examined the individual characteristics of practicing teachers' computer usage in the classroom.

Ming Lei, The University of Alabama (A Suggestion of a Motivational Framework in Education) discussed the need to incorporate self-regulation, future time perspective, and emotional control into teachers' daily instructional routine. H. Michael Crowson, The University of Alabama (Perceptions of Instrumentality in Preservice Teachers: Implications for Teaching Educational Psychology) provided a description of instructional practices intended to support preservice teachers' perception of utility within an educational psychology course.

Jenefer Husman, University of Alabama, served as discussant for the session and provided guidelines for integrating motivational theory into classroom practice. Following the brief discussion a five-to-ten minute period for audience questions and discussion was provided.

12:00 p.m.-12:50 p.m. AT-RISK STUDENTS
Session T#018 (Symposium).. Salon A

ORGANIZER: Marcia R. O'Neal, The University of Alabama at Birmingham

RESILIENT STUDENTS, TEACHERS, AND SCHOOLS

Introduction and Overview

Jerry Patterson, The University of Alabama at Birmingham

The body of literature focusing on resilience has grown substantially within the last five years. Researchers and practitioners from a number of fields have attempted to define and measure the construct, identify characteristics associated with resilience, and describe programs or settings in which resilience is promoted. Given the numbers of at-risk children and youth in our public schools as well as the increases in the number of headline-making tragedies and crises facing students, teachers, and educational leaders, it becomes critically important for professionals in education to remain current on the topic of resilience. This symposium included an introduction and overview as well as four presentations that focused on selected aspects of resilience.

Teaching Young Children Resilience Strategies

Thomas William Jambor, The University of Alabama at Birmingham

With nationwide attention focusing on children, anger and violence, accompanying research attention has focused on preventive, proactive programs for teaching young children resilience strategies. The concept of resilience, the ability to achieve goals in the face of adverse conditions, has been studied with children as young as two years old. In the past year, the quantity and quality of research studies of young children learning resilience strategies has increased dramatically. This presentation focused on recent lessons learned about teaching young children resilience strategies, with particular emphasis on strategies applied in social play settings.

Preparing Resilient Teachers for Urban Schools

Janice H. Patterson, The University of Alabama at Birmingham

This paper addressed the need for resilience in teachers in urban settings and possible strategies for addressing this need. More than 30% of beginning teachers leave the profession in the first three years. The statistics are even higher for those who work in urban schools. Recent research coming out of professional development sites suggests that increased field-based preservice experiences can improve teacher resilience. If findings hold, professional development sites may offer a key to resilience for individuals, school districts, colleges of education, and policy makers.

Resilience in the Work Place

Andrew Bissinger Hatley, The University of Alabama at Birmingham

Each of us has some degree of resilience. An organization's resilience is based, at least in part, on such factors as the composition of the group, organization size, and environment. Group resilience is sometimes more difficult to analyze and foster than individual resilience. This presentation addressed the interests of participants from varied disciplines, levels, and management styles by presenting examples, descriptions, and methods for fostering organizational resilience in the workplace. This information should help participants understand the advantages for an organization that utilizes resilience traits. Outcomes can then be forecast based on other experiences and predictors relative to the respective organization.

Measuring Resilience

Marcia R. O'Neal, The University of Alabama at Birmingham

A number of instruments have been developed for the purpose of measuring resilience. Some focus on resilience at the organizational level, whereas others examine individual resilience in various populations. This presentation offered a review of selected instruments, including comparison of the content among the instruments, review of available information on instrument development, discussion of the technical properties of the instruments, and a summary of the reported uses of the instruments in published studies. The presentation included recommendations for educators.

12:00 p.m.-12:50 p.m. **INSERVICE AND TEACHER EDUCATION**
Session T#019 **(Discussion Session)**.. **Salon B**

PRESIDER: Mary Jane Bradley, Arkansas State University

STOP THE BLAME: STRATEGIES FOR THE NEW MILLENNIUM CLASSROOM

Camille B. Branton and Marilyn S. Snow, Delta State University

Jonesboro . . . Portland . . . Littleton . . . . The mention of these cities brings anxiety to educators throughout the country. The reality is that this insidious problem is quietly creeping through the educational systems throughout our nation. No school seems to be immune; small towns as well as cities are being assaulted on a daily basis with only the most notorious making the headlines. Now is the time to begin planning for the future of education and its purpose in the twenty-first century. A nationwide search is being undertaken to find the key to the cause of the senseless violence found in our schools. Task forces are being set up for management and crisis intervention, research teams are studying the associated psychological and social factors, and stricter weapons laws are being debated; however, the violence continues.

In trying to solve this question, some have looked at factors related to violence in a cultural context. Music, movies, dress, fantasy games, and Internet access appear to some to be linked to this violent behavior. Other groups look to the destruction of the family values, attitudes of irresponsibility, and lack of community involvement as reasons for these expressions of violence. Educators have been careful to direct responsibility to factors outside of academia. The epidemic does not appear to be improving. No longer can educators look to outside factors for the answer to the dilemma. Evaluation within the educational system as well as without must be undertaken.

This paper addressed methods of preventing violent behavior in schools with particular attention to teaching practices within the classroom. More effective use of theories of motivation, personality, and interpersonal development within individual classroom and social and psychological theories affecting human behavior were discussed. Attitude changes necessary for teaching in the twenty-first century were explored.

THE INTERNET AND LITERACY EDUCATION AT THE GRADUATE LEVEL

Marie C. Roos, Jackson State University

Many graduate faculty are exploring the use of the Internet to facilitate electronic teaching, learning, and research. Appreciating the benefits of this medium for instruction and research, this investigator conducted an exploratory study concerning the Internet and literacy education at the graduate level. This study was a literature review and as such was preliminary to a descriptive research study on the Internet and language arts and reading and a second study, a program explication of the researcher's infusion of Internet technology in graduate courses in language arts and reading.

The problem of this study concerned a review of the literature on the Internet and literacy education at the graduate level to determine its educational efficacy. To this end, a survey of the literature was conducted concerning current practices bearing on electronic teaching, learning and research relative to literacy education. An ERIC search was conducted, and Internet search engines such as Lycos, Excite, Web Crawler, Yahoo, and others were employed to identify the literature. The selection of relevant articles/books/resources was based on the following criteria: (1) accessing the Internet for information, (2) consulting the Professor's Websites for course materials and information, (3) using e-mail to send/receive course-related messages, listservs, (4) perusing professional associations' Websites, (5) using electronic journals such as "Reading Online" (IRA), (6) employing research tools, e.g., search engines, (7) citing exemplary practices, resources, and (8) other.

The literature was critically reviewed in terms of the eight criteria listed. Findings of the review were discussed, and implications for graduate literacy education were shared. Recommendations for further study were made.

AN ASSESSMENT OF PRESERVICE TEACHERS' TOLERANCE OF DIVERSITY

Joan C. Harlan, Sidney T. Rowland, and Mitylene Arnold, The University of Mississippi

Educators and teacher educators currently recognize the importance of both respecting and celebrating the differences among us. Both teacher educators and preservice teachers should be able to successfully interact with all students; something that can be accomplished only if one is aware of one's own biases, prejudices and/or predispositions. This study examined preservice teachers' tolerance of differences in race, gender, religion, ethnicity, socioeconomic status, and disability.

During the 1998 fall semester, 117 preservice teachers enrolled in the Development and Diversity classes at The University of Mississippi anonymously completed a 21-item instrument that measured tolerance of differences of various groups. The instrument used a five point Likert scale. Findings for the 117 completed scales were tabulated. The sample was largely white and female. Students' ages ranged from 19 to 40 with an average age of 22.

Results indicated that disturbingly large numbers of preservice teachers had serious prejudices on many of the dimensions measured by the scale. The results also indicated that many of the preservice teachers had gross misperceptions about certain groups. The information from the study was used to plan changes in the Development and Diversity course offered to preservice teachers. The specific findings and instructional implications were presented.

12:00 p.m.-12:50 p.m. **COMPUTER EDUCATION**
Session T#020 **(Discussion Session)** .... **Salon C**

PRESIDER: Stephen Obringer, Mississippi State University

A COMPARISON OF ATTITUDES TOWARD COMPUTER USE OF PRESERVICE AND INSERVICE TEACHERS

Kaye Pepper, The University of Mississippi

Today, at least 97% of all American schools use computers in their instructional programs, and many schools are expanding upon their computer capabilities. Despite the heavy investment in these modern technologies, their potential will never be realized if the classroom teacher is not prepared to effectively use them. Only half of all classroom teachers report that they have used computers in their instruction, and fewer still have discovered the potential of interactive technologies. Major factors in this underuse are that many teachers are fearful of computers and lack an understanding of the computer and related technology's value in teaching the curriculum.

Some believe that attitudes of teachers toward computers may influence their effective and innovative use in the classroom. Researchers have found that experience with computers positively influences preservice and inservice teacher attitudes. Instructional technology classes developed to teach the use and understanding of computer technologies in an educational setting could be the perfect opportunity to influence teacher attitudes toward computers. This, in turn, may promote the effective use of the computer in the classroom.

The results of a 50-item survey developed from several sources after a thorough review of the literature was used to determine computer attitudes of approximately 50 preservice teachers and 30 inservice teachers enrolled in graduate and undergraduate classes in the fall quarter. Students were asked to rate the items from strongly agree to strongly disagree. Percentages of positive responses were compared to determine results.

The results of the pretest and posttest administration of the survey reflected changes in the attitudes of preservice and inservice teachers upon completion of the classes. Also noted were differences in the attitudes of the preservice teacher group compared to the inservice teacher group. Final analysis of the results indicated that there was actually little difference in the attitudes of preservice and inservice teachers. However, there were negative results in attitudes of inservice teachers in some categories from the pretest to the posttest. Some indicated that after the instructional technology course they realized that there is much extra work involved in including technology in the classroom. The results of the survey helped to determine changes to be made in instructional technology classes to more positively effect attitudes of preservice and inservice teachers.

INTERNET ACCEPTABLE USE POLICIES IN ALABAMA SCHOOL SYSTEMS

Feng Sun and James E. McLean, The University of Alabama at Birmingham

During the past two decades, computer and information technology has become a dominant world force, moving economies and creating knowledge at an unprecedented pace. Today, the Internet is the focus. It is the most important technological revolution influencing many sectors of society, including education, being used increasingly to complement and supplement traditional modes of instruction. Used appropriately, the Internet can add positive value to the learning process, helping both teachers and students improve the effectiveness and efficiency of the teaching-learning process by motivating students into self-discovery and developing their reasoning skills. At the same time, many concerns have been expressed about students' proper use of the Internet and the value it adds to education. Many school districts are seeing complications of students' surfing in uncharted waters. While most Internet sites have potential educational value, a small percentage can be objectionable because of racial, sexist, political, sexual, or other materials. In order to protect students and avoid repeating mistakes that accompanied the introduction of this technology into education, educators need to take actions to meet this challenge. The purpose of this study was to determine the current status and need of acceptable use policies for students' use of the Internet in Alabama school systems.

The study used electronic survey methodology with 14 questions in multiple choice, skip pattern, and short-answer formats that could be returned via e-mail or completed anonymously on an Internet web site. The data were analyzed using SPSS, and descriptive statistics were reported.

The results suggested that there is a great need for Internet use policies in Alabama. While the students in a majority of school systems use the Internet, a minority of the systems have adequate Internet use policies. The results have implications for all schools or systems where students use the Internet.

TECHNOLOGY SCHOLARSHIP PROGRAM FOR ALABAMA TEACHERS: A FOLLOW-UP SURVEY OF PROGRAM PARTICIPANTS AT ONE UNIVERSITY

Eamonn Joseph Walsh, Jr., Rachel Fowler, and Virginia Avery,
University of Montevallo

The Technology Scholarship Program for Alabama Teachers (TSPAT) was created by the state as a means to provide certified and actively employed Alabama public school teachers with financial assistance in acquiring training in the use and integration of technology. Under the terms of TSPAT, eligible teachers may use the scholarship money to attend a sequence of three approved graduate-level technology courses offered at higher education institutions throughout Alabama.

In an effort to monitor the effectiveness of the TSPAT course sequence in preparing its students, one of the participating universities surveyed all teachers (n=56) who had completed its TSPAT-approved technology sequence since program implementation in 1993. An open- and closed-ended questionnaire was used to identify respondents' perceptions regarding (1) strengths and weakness of various course components, (2) course effectiveness in preparing teachers to integrate technology into the classroom, and (3) factors within the schools that influence technology integration.

Survey analysis revealed practical suggestions for course enhancement that would be considered in future modifications of the technology sequence. Additionally, results may have provided meaningful input into school- and district-based decisions regarding technology integration.

12:00 p.m.-12:50 p.m. **LANGUAGE, ENGLISH AND PRESCHOOL EDUCATION**
Session T#021 **(Display Session)**.. **Salon E**

STYLE IN THE CONTEMPORARY RETOLD FOLKTALE

Gloria D. Currier Bunnell, Mississippi State University

The study analyzed contemporary retellings of traditional folktales to determine (1) the stylistic structures used by authors in selected exemplary retold folktales published in the last 20 years, and (2) the lexical choices used by authors to convey the folkloric experience in selected exemplary retold folktales published in the last 20 years to establish a guide for the informed selection of quality folkloric literature for use in the classroom.

The eight books chosen for this stylistic analysis were deemed exemplary by their appearance on at least five of the national authoritative lists compiled by specialists in the field of children's literature and contained at least 1000 words of text. General stylistic categories used to divide the stylistic features into sub-categories for the analysis included choice of diction and sentence structures.

The analyst conducted four readings on each book recording the following findings from each reading: (1) general impressions of the style and structure of the book, (2) lexical features found in the book, (3) sentence structural features found in the book, and (4) any emergent categories of features or overlooked stylistic features found in the book. Data sheets were compiled with each reading, and a descriptive narrative of the stylistic profile was written for each book in the sample.

This display consisted of a matrix identifying the patterns of style from each book that emerged from the data, a summary of the stylistic categories used to analyze the writing styles, examples from the books exhibiting the stylistic patterns used by the authors, and the books analyzed. This project may be used by teachers as a guide for identifying and selecting quality folkloric material for use in the classroom from the vast amount that is available today.

INNOVATIVE TEACHING: CREATIVE STUDENT PROJECTS FOR THREE MAJOR LITERARY WORKS

Sue S. Minchew, Mississippi State University, and
Wendy Davis, Starkville (MS) High School

Best practice research has shown the benefits of innovative teaching techniques that make learning fun in student-centered classrooms where students are involved in hands-on activities. Students in just such an environment in two 10th-grade, accelerated English classes taught by the same teacher participated in creative projects for three major literary works: William Shakespeare's *Julius Caesar*, George Orwell's *Animal Farm*, and Harper Lee's *To Kill a Mockingbird*. Samples of student works created as part of the following assignments will be displayed.

For the *Julius Caesar* project, students drew designs of period costumes appropriate for characters in the play. With students' names omitted from the designs, students in each class judged the designs of students in the other class, resulting in first-, second-, and third-place winners from each class. The winning designs with names attached were displayed on the classroom bulletin board with the title "Roman Runway."

An imaginative *Animal Farm* assignment involved students in writing resumes for the animal characters in the novel. In creating the resume for her or his chosen character, each student had to use proper resume format to provide information about the character's address, educational background, work experience, honors, extracurricular activities, and references.

Using the events and characters in *To Kill a Mockingbird*, student groups created newspapers. Students not only wrote news articles, editorials, gossip columns, advertisements, cartoons, and obituaries, but arranged the writings in the typical newspaper format with a front page, editorial page, and articles laid out in columns.

The display demonstrated how to involve students in projects that allowed them to use their creative imaginations and various talents in assignments that were not only fun and instructive but also addressed a variety of learning styles. It proved interesting to practitioners and teacher educators.

IMPROVING CHILDREN'S WRITING PROFICIENCY AT AN ECONOMICALLY DISADVANTAGED, RURAL ELEMENTARY SCHOOL

Jack G. Blendinger and Lauren Rabb Wells, Mississippi State University

Over-emphasis on high-stakes achievement testing for accreditation purposes has caused elementary schools to abandon creative writing and the arts in favor of spending more time drilling on basic skills. Such practice has resulted in an impoverished education for many economically disadvantaged African American children living in rural environments.

This case study focused on the efforts of two university researchers serving in the role of participant-observers to improve children's language arts proficiency though designing an innovative writing program that integrated writing and reading with the visual, musical, and dramatic arts. Key assumptions underpinning the program included: (1) reading and writing are intertwined and mutually dependent--the more children read, the better they write, and the more children write, the better they read; (2) art enhances and compliments reading and writing; and (3) involving children in creative writing through the use of "real" manuscripts and related artistic experiences enriches learning.

Interest in improving the writing proficiency of the 600 students, mostly African American, attending the economically disadvantaged, rural, K-6 elementary school described in this case study, resulted from conversation between the principal and the two researchers who designed and implemented the program on behalf of their university's service commitment to the public schools of the state. The presentation described in step-by-step detail how the creative writing intervention was implemented and the results--some encouraging and some disappointing. Samples of children's work were shown in the display.

Authentic case studies highlighting children's actual learning experiences, such as the one presented in this session, are needed for the continued development of the "best practice" literature base addressing the language arts. The findings presented in this case study make a meaningful contribution to that literature base.

A COMPARISON OF TOY PREFERENCE BETWEEN MALE AND FEMALE PRESCHOOLERS

Karen I. Dittmer and Linda W. Morse, Mississippi State University

Previous research has indicated that children learn to gender stereotype toys by two years of age. Other research has stated that use of "masculine" versus "feminine" toys leads to different skill acquisition. Previous research included data collection solely by observation. The present study served to extend previous research by the use of interviews.

Participants consisted of 16 three- to five-year-old children. The purpose of the current research project was to observe children's toy preferences in a play situation to determine if there was a relationship between the gender and age of children and the category of toys (feminine, masculine, and gender-neutral) that children play with. Toys rated by a group of parents as masculine, feminine, and gender-neutral were presented to each child individually. After observation, the children were asked why they played with certain toys and not others. The purpose of the open-ended questions was to determine if the child verbalized gender stereotypic phrases regarding the reasons they played with certain toys and to determine if there were any differences in responses based on age.

Results indicated that, contrary to previous research, there were no significant differences in the types of toys girls and boys played with (feminine, masculine, or gender neutral) in regard to gender or age. Discussion suggested implications for further research in the area of learning and gender stereotypes.

12:00 p.m.-12:50 p.m. **COLLEGE STUDENTS AND PERFORMANCE ASSESSMENT**
Session T#022 **(Display Session).. Salon F**

I'LL GO TO THE LIBRARY TOMORROW: THE ROLE OF PROCRASTINATION IN LIBRARY ANXIETY

Qun G. Jiao, The City University of New York, and
Anthony J. Onwuegbuzie, Valdosta State University

Academic procrastination is prevalent among college students. Indeed, approximately 95% of students procrastinate in academic tasks such as writing a term paper, studying for examinations, and keeping up with weekly reading assignments. Apparently, this academic procrastination stems primarily from fear of failure and task aversiveness. At the graduate level, it has been estimated that as many as 60% of students procrastinate on academic tasks, with more than two-thirds reporting that they would like to decrease their tendency to procrastinate. In a recent study, it was theorized that high-anxious graduate students typically procrastinate while engaging on library tasks. However, this theory has not been empirically tested. Thus, this study investigated the relationship between academic procrastination and library anxiety at the graduate level.

Participants were 133 graduate students enrolled in three sections of a required introductory-level educational research course at a southeastern university. Findings revealed that overall academic procrastination was significantly positively related to the following dimensions of library anxiety: affective barriers, comfort with the library, and mechanical barriers. A canonical correlation analysis revealed that academic procrastination resulting from both fear of failure and task aversiveness were related significantly to barriers with staff, affective barriers, comfort with the library, and knowledge of the library. Implications for library anxiety reduction as a procrastination intervention were discussed.

LIBRARY ANXIETY AMONG INTERNATIONAL STUDENTS

Qun G. Jiao, The City University of New York, and
Anthony J. Onwuegbuzie, Valdosta State University

The United States currently has the largest number of international students, comprising approximately one-third of the world's total. Unfortunately, many foreign students, particularly those from countries whose native language is not English, face an array of difficulties when utilizing academic libraries. As a result, levels of library anxiety typically is higher among international college students than among their counterparts. This study of 125 non-native English-speaking university students investigated the prevalence of the dimensions of library anxiety among this population.

A series of dependent t-tests, using the Bonferroni adjustment, revealed that, of the five dimensions studied, mechanical barriers, which refers to feelings that emerge as a result of students' reliance on mechanical library equipment (e.g., computer printers, copy machines, and change machines), was the greatest source of library anxiety. Indeed, mechanical barriers had statistically significantly higher mean ratings than did the four other dimensions. Affective barriers, which refers to students' feelings of inadequacy about using the library, was the second most prevalent dimension, having statistically significantly higher mean ratings than did the three remaining dimensions. This dimension was followed by barriers with staff and comfort with the library, respectively. Knowledge of the library was the dimension was the least source of library anxiety.

The effect sizes pertaining to these differences, which were calculated by dividing the mean differences by the pooled standard deviations, ranged from .26 to 1.84. Based on these findings, librarians and library educators should be cognizant of the role that technology plays in inducing library anxiety among international students.

DEFENSE OR OFFENSE? WHAT IS THE BETTER PREDICTOR OF SUCCESS FOR PROFESSIONAL FOOTBALL TEAMS?

Anthony J. Onwuegbuzie, Valdosta State University

Football is one of the most popular professional sports in the United States. Interestingly, many football coaches, analysts, and supporters have argued that "defense wins championships." Yet, no formal empirical test of this claim appears to exist. Thus, the purpose of the study was to determine which offensive and defensive factors best predict a team's winning percentage, using data from the 1997 regular football season. It was expected that knowledge of these factors could help coaches decide where to focus their attention, as well as assist analysts and fans in predicting a team's performance.

Findings revealed that (1) the total number of points conceded explained 73.5% of the variance in success, whereas the number of points scored explained 14.7% of the variance; (2) the total number of rushing yards conceded by the defense explained 26.8% of the variance in success, whereas the total number of fumbles given away by the offense explained 19.0% of the variance; (3) when turnover differential (i.e., the difference between the number of fumbles and interceptions gained by a team's defense and the number of fumbles and interceptions given away by same team's offense) was included in the model, this variable explained 43.4% of the variance in success, with the total number of rushing yards gained by the offense explaining a further 9.3% of the variance; and (4) the total number of touchdowns scored by the offense from within the 20-yard zone explained 53.3% of the variance, whereas the total number of touchdowns conceded by the defense from within their own 20-yard zone explained 22.0% of the variance. These findings suggested that, outside the 20-yard zone, the attainments of the defense were more important than were the offensive attainments in predicting whether a NFL team would be successful, thereby supporting the claims of many football coaches.

12:00 p.m.-1:30 p.m. **LUNCHEON FOR MSERF BOARD MEMBERS** .... **Card Room**

1:00 p.m.-1:50 p.m.
Session T#023
PROFESSIONAL DEVELOPMENT SCHOOLS (Symposium) .... **Salon A**

ORGANIZER: Jerry G. Mathews, Auburn University

THE NEW FRONTIER: EXPANDING EDUCATIONAL BOUNDARIES THROUGH PROFESSIONAL DEVELOPMENT SCHOOL INITIATIVES

The West Alabama Learning Coalition: Expanding Boundaries Through Collaboration

Frances K. Kochan, Auburn University

This session described the context of the West Alabama Learning Coalition, including what it is, how it began, and what has been accomplished to date. The Coalition is a Professional Development School network formed to nurture and support the renewal of N-16 educational opportunities throughout the state. In particular, there is an emphasis on building trusting relationships between N-12 schools and higher education, improving student achievement, fostering professional development, and supporting ongoing inquiry.

Elementary Boundaries: Increasing Public Awareness of Quality Education

Margaret E. Ross and Cynthia J. Reed, Auburn University

Loachapoka Elementary School and Auburn University, as a PDS partnership, work to expand educational boundaries by providing hands-on learning experiences for pre-service teachers, increasing professional opportunities for teachers and administrators through national presentations, and increasing public awareness of the quality education provided by the school. In efforts to increase public awareness of and involvement in the educational process, a biannual "context-enriched" report card was developed. This report card supplements the statistically oriented, standardized-test-focused state report card and informs the public, in an understandable fashion, of innovative programs as well as progress toward meeting educational goals.

Improving Student Performance: The Loachapoka High School SAT9 Intervention Program

Jerry G. Mathews and Jill Salisbury-Glennon, Auburn University

This session was of interest to educators concerned with improving student achievement. Auburn University's Truman Pierce Institute, The West Alabama Learning Coalition (WALC), Lee County School Board, and Loachapoka High School formed a collaborative partnership with a shared vision to assist Loachapoka seventh- and eighth-grade students to improve their performance on the Stanford9 achievement test. A minimum three-year commitment was made in an effort to improve standardized test scores over time by providing tutoring, individualized computer assisted instruction, and other instructional strategies. Funding was provided by the Lee County School Board, the Auburn University College of Education Outreach Grant, and The Truman Pierce Institute. At the time of this symposium the initiative was in its pilot year.

Breaking Boundaries: Preparing Educational Leaders to be Policy Advocates

Cynthia J. Reed and Joe L. Ross, Auburn University; Dorothy Dolasky,
Opelika City (AL) School District; and Terry Irvin,
Columbus State University

Educational leaders need to be proactive rather than passive. One was to accomplish this is by encouraging future educational leaders to be policy advocates. This session described the process used to prepare a policy briefing about Professional Development Schools, which was designed by students in a doctoral level educational policy course. To prepare for this, they read extensively, and interviewed nationally known leaders in the PDS movement as well as members of the West Alabama Learning Coalition about PDS policy needs. After collecting and analyzing this data, students prepared a presentation on recommended PDS policies for the state of Alabama. This was presented to selected legislators and other key educational leaders from the state.

1:00 p.m.-1:50 p.m. **CURRICULUM**
Session T#024 **(Discussion Session)**.. **Salon B**

PRESIDER: Diann Rozell, University of North Texas

A COMPARATIVE STUDY OF ACADEMIC CURRICULUM, TEACHER COLLABORATION, AND DISCIPLINE POLICY AMONG SELECTED ELEMENTARY SCHOOLS AND SECONDARY SCHOOLS IN THE STATE OF ALABAMA

Carolyn McTier and Abraham A. Andero, Alabama State University

The purpose of this study was to determine if selective elementary school teachers, secondary school teachers, and administrators felt that their schools and school systems were implementing effective school components within the overall curricula.

The survey was conducted during a one-week period, June 13-17, 1998. The participants were asked if they had at least one year of teaching experience and taught in an elementary or secondary school in Alabama. The surveys were then compiled, the percentage for each response level was determined, and analyses were made to determine the differences among the elementary schools and secondary schools in terms of academics, teacher collaboration, and discipline policy. The differences between the responses of elementary and secondary teachers were also analyzed. The subjects, teachers and administrators in the elementary and secondary schools in the state of Alabama, worked in the following counties: Autauga, Bullock, Butler, Dalla, Elmore, Houston, Jefferson, Lowndes, Macon, Montgomery, Russell, and Pike.

Of the 116 educators surveyed, 74% agreed that their school systems were creating effective academic plans, 41% agreed that collaboration was effectively incorporated in their school systems, and 53% agreed that the overall discipline policies were effective.

The following conclusions were drawn: (1) school systems in Alabama were implementing effective school programs, (2) overwhelmingly, the academic curricula within the school systems appeared to be well incorporated and effective, (3) collaboration programs for teachers in various school systems were implemented at the elementary and secondary levels but were not appropriate for the effective school plans, and (4) discipline policies within school systems existed and were effective, but students and the community were not involved in development.

EVALUATION OF CONSTRUCTIVIST PEDAGOGY: INFLUENCE ON SCIENCE FAIR PARTICIPATION

Robbie E. Foxx, Mississippi State University

The purpose of this research was twofold: to assess science performance of students instructed utilizing the constructivist approach, and to explore the effects of the constructivist approach's influence on science fair participation. The research examined (1) current reform in science education and (2) analyzed by observation, instruction, and experiences, the use of the constructivist learning model as a mechanism for teaching science content. Both empirical and qualitative research techniques were employed to fully explore the problem.

Through this research it was proposed that (1) teachers would engage in constructivist techniques in the classroom, (2) involve students in events such as science fairs, (3) require that students be engaged in the practice of the scientific method, and (4) provide opportunities for students to discover and create new ways to solve problems. Furthermore, a long-range goal was for students to discover concepts, principles, and the very nature of science by doing it themselves on a continual basis.

Science education reform, driven by a rapidly advancing, technologically developed society, demands the attention of elementary and middle school curriculums. Science education training, in current benchmarks, underscores the theory of constructivism (in line with the theory of Piaget), and constructivist pedagogy, shown through research to produce favorable results academically. Thus, educators can address current science standards by utilizing pedagogy that focuses on constructivist theory at the intermediate level. Research suggests that students who participate in constructivist activities generally score higher on standardized tests as opposed to students who do not. The tenets of constructivism include, but are not limited to such constructs as: (1) the introduction of real-life problems requiring solutions, (2) student-centered instruction facilitated by the teacher, (3) productive group interaction during the process, and (4) authentic assessment and demonstration of student progress.

IMPROVING SCHOOL CURRICULUM THROUGH TECHNOLOGY

Patty Reed, Oklahoma City Community College,
and Peggy Fraiser, University of Oklahoma

Distance learning technology is a term many people were unfamiliar with up until a few short years ago. However, today many people in the educational field view distance education as having far reaching implications for educators and students in all areas. Because distance learning technology is inclusive of many different forms of education, the following information was divided into television-based instruction and Internet based instruction. Again, because each category has the potential for containing such a vast amount of information, the categories were subdivided using the following: (1) use, (2) considerations, (3) assessment, (4) limitations, and (5) further readings.

Television Based Instruction: This paper discussed how schools have broadened their curriculums for students through the use of television-based educational programs in the areas of arts, health, math, language arts, science and technology, social studies, world languages, and college bound advanced placement programs. Certain considerations for instructors, students, and site facilitators were taken into account when using television- based instruction, and suggestions for integrating assessment procedures through interaction and feedback were made. We also explain certain limitations were lack of visual clues for instructors and lack of student self-discipline.

Internet-Based Instruction: Furthermore, the paper discussed the Internet as a tremendous research and communication tool for instructors and students allowing synchronous and asynchronous learning. Some of the considerations reviewed involved the expense of access and the implementation of the Internet. In conjunction with this information, the availability of test-generating computer software and Internet-based shareware and freeware was pointed out. Some of the limitations the paper brought forth with the Internet were the public access to e-mail messages as well as website addresses having to be monitored by instructors.

1:00 p.m.-1:50 p.m. **COMPUTER EDUCATION AND TECHNOLOGY**
Session T#025 **(Display Session).. Salon E**

TECHNOLOGY AND MORAL DEVELOPMENT: ANY AGE - ANY DISCIPLINE?

Katherine G. Kirkpatrick and Bonnie H. Hairrell, Birmingham-Southern College

This presentation was based on and combined Celestin Freinet's philosophy of education and pedagogical techniques and information from two interdisciplinary pilot studies.

The first pilot study was conducted in a college laboratory setting and included both business and education students. Students were required to explore their personal values and to make ethical choices. The process involved both written and verbal communication opportunities via an academic bulletin board and small group interaction.

In response to a state mandate that character/values education be taught in all public schools, two college students (who participated in the first pilot study) conducted the second pilot study in two third-grade classrooms that were located in separate schools. During a six-week period, the college students led the third-grade students in an exploration of six different moral dilemmas. Each third-grade student discussed her/his values and moral ideas with her/his "e-mail pal" at the partner school.

Regardless of grade level or academic discipline, it seems imperative that students be provided with opportunities to examine personal values and to progress in their ability to make ethical choices. Newspaper and television headlines indicate an obvious need for ethical citizenry and leadership in our world today. These pilot projects indicated that students of any age and in any discipline can make progress in moral development.

Methods of Freinet's pedagogy utilized in these two projects and display included the following: (1) Social Interaction-Students interacting individually and in groups as a means of discovering and gaining knowledge, (2) Active Learning- -students using hands-on activities and personal experiences, (3) Autonomy- -students having freedom to choose and think for themselves, (4) Teacher as Facilitator- -teachers working with students as assistants or guides and, (5) Technology of the Day- -His day-the printing press. Today-the computer.

PREPARING PRESERVICE TEACHERS TO USE TECHNOLOGY THROUGH COLLABORATION WITH ELEMENTARY STUDENTS

Rachel B. Fowler, Joseph Walsh, and Virginia Avery,
University of Montevallo

During the 1999 spring semester, an advanced undergraduate technology course designed to prepare preservice teachers to integrate technology into the classroom was used to pilot a collaborative project with fifth graders at a local elementary school. The goal of the project was to provide the enrolled preservice teachers with actual experiences in working one-on-one with the elementary students while using technology as a tool.

To accomplish this, each preservice teacher was paired with a fifth-grade student and together they were required to develop a HyperStudio-based lesson on a topic relevant to the American Revolution. Throughout the semester, the fifth-grade students met in scheduled sessions with their preservice teachers to (1) research their topics using the Internet, (2) discuss the information they found, (3) develop the content of their lesson, (4) create a storyboard, and (5) create their HyperStudio stack. The preservice teachers were additionally required to record and report on their experiences with the fifth graders and to research articles in order to compare their perceptions and findings with others in the field.

The reports of the preservice teachers indicated that their experiences with the fifth graders were highly beneficial in developing their ability to interact with students. Through this added component of this advanced technology course, they encountered anticipated and unanticipated events that could have only been revealed through this type of field experience. These preservice teachers now have an experiential foundation for incorporating technology into their future classrooms.

USING A MULTIMEDIA AUTHORING SYSTEM TO CREATE INNOVATIVE LEARNING ENVIRONMENT AND SUPPORT RESEARCH

Robert K. Atkinson, Mississippi State University

To date, many educators have not realized the potential that computer technology has for creating innovative learning environments as well as providing an ideal environment in which to conduct research. This session was intended to showcase some of that potential by demonstrating how a computer-based multimedia environment was used to support the creation and testing of one instructional innovation, namely, a multimedia worked example for teaching proportional problem solving. Specifically, the session illustrated how a multimedia authoring system was used to combine three empirically-based instructional principles into the structure of a single worked example and how it permitted the utility of these multi-component examples to be examined by recording precisely how the students studied them.

Although it is difficult to coordinate visual and auditory information in a book-based medium, in contrast, a computer-based medium is ideally suited for presenting instruction in multiple presentation formats or sensory modalities. This session included an illustration of how a computer-based multimedia environment was leveraged to create a worked example that: (1) was sequential - - in that it consisted of a sequential presentation of problem states, (2) incorporated a second modality that was coordinated with the sequential presentation of problem states, and (3) was constructed to emphasize meaningful conceptual pieces in a problem's solution, through a variety of visual and temporal indicators.

A book-based medium is also limited by the types of dependent measures that can be readily employed to test an educational innovation. For example, researchers have found that it is difficult to record exactly how a student processes an example during instruction. However, as this session illustrated a computer-based medium can be effectively used to capture the subtleties involved in how a student processes an example (e.g., how much time he/she spent viewing a particular conceptual piece contained in an example's solution).

TECHNOLOGY PROBLEMS AND SOLUTIONS: APPLYING THE TOOLS

Vivian H. Wright and Kenneth E. Wright, The University of Alabama

This presentation outlined fundamental issues of using technology in the athletic training profession and offered practical solutions to assist professionals in technological integration. Educators around the world are investigating virtual, educational opportunities as they seek to recruit and retain the twenty-first century student. The new learner is more familiar with sophisticated educational technology largely because of its the availability and ease of using the Internet and other new technologies. While technology continues to move at a rapid rate, researchers will have consistent challenges in assessing issues related to productivity, effectiveness, performance outcomes, and assessment.

This presentation addressed fundamental problems related to technology and offered practical solutions. Issues included development of an Intranet/Internet knowledge site, application of multimedia for the educational setting, distance education components, and future trends of multimedia technology. Practical tips related to effective web site construction and use, database tips, computer assisted instruction modules, technology based written simulations, and more were presented.

1:00 p.m.-1:50 p.m. **CURRICULUM, TESTS, TEACHERS, AND READING**
Session T#026 **(Display Session)... Salon F**

A TEST OF VALIDITY OF USING THE ITBS AS A MEASURE OF INSTRUCTIONAL QUALITY

Fred H. Groves and Ava F. Pugh,
Northeast Louisiana University

The purpose of this study was to determine the validity of the Level IV of the ITBS as an instrument for assessing instructional quality. This research was one of the components of the national research being conducted by James Popham. Five educators and five non-educators were participants in the study in which each test item was evaluated according to five different factors: importance, is it actually taught, socioeconomic status, inherited capabilities, and overall validity. The educator participants included one male and four females, and the non-educator group was composed of two males and three females. For each of the test items, participants rated each item for all five factors according to a "yes-question mark-no" set of choices. Results indicated that educators were more critical than the non-educators. Educators tended to judge their areas of specialty more critically than areas of which they were unfamiliar.

Only two of the 13 subscales (capitalization and punctuation) received a high rating (90%) for no negative or uncertain judgments. Five subscales were scored at 60% or less for favorable ratings: reading comprehension, usage and expression, social studies, science, and maps and diagrams. Because five of the 13 subscales received positive, i.e. "yes" ratings, of 60% or less, this could have indicated that the ITBS was not an effective measure for instructional quality, or at least for these five subscales. Thus, this standardized test should be used with caution, if at all, when assessing a school's instructional quality.

AN INSTRUCTIONAL PACKAGE INTEGRATING SCIENCE AND SOCIAL STUDIES INSTRUCTION AT THE FIFTH-GRADE LEVEL

Kathy S. Hulley, Lincoln Memorial University

Integrative education is being implemented by classroom teachers who want to immerse students in an environment rich in problem-solving skills, critical analysis skills, ethics, valuing of knowledge, and communication of learning. Several subject areas in the curriculum have been integrated, such as literature with social studies and mathematics with science. The focus of this study was on the integration of science and social studies at the fifth-grade level using the Mississippi State Department of Education Curriculum Guidelines and Objectives and National Science Education Standards.

An instructional package of lesson plans that teachers could use as ideas to create their own plans for an integrated curriculum of science and social studies was devised. The Mississippi State Department of Education Curriculum Guidelines and Objectives for Social Studies at the fifth-grade level contains 15 competencies. Three standards from the National Science Education Standards were chosen. They included: (1) science and technology, (2) science in personal and social perspectives, and (3) the history and nature of science. Each competency for social studies has three lesson plans developed that integrated the three chosen standards from the National Science Education Standards. Each lesson plan included an objective, materials, procedures, and evaluation for teachers. A total of forty-five lesson plans were developed integrating science and social studies.

This quantitative study was done to encourage teachers to use the lesson plans as a guide to create their own plans integrating science and social studies in accordance with their school's curriculum guidelines. Teachers should consider the learning levels and styles of their classroom. Presented were samples of lessons plans and their implications for integrating the curriculum.

A PROFESSIONAL DEVELOPMENT PROGRAM FOR ELEMENTARY GRADE SCIENCE TEACHERS: USING READING TOOLS TO INCREASE COMPREHENSION

Susan T. Franks and Gene Franks, Georgia Southern University

This session documented the results of a three-phase professional development program and research study. The purpose of the study was to provide elementary grade science teachers with training in the development and implementation of structured reading guides for their current science texts and supplemental science materials.

Phase one was a pilot study implemented by a classroom teacher who examined the effect of reading guides on the comprehension of textbook assignments with a population of fifth graders. The study included a measurement of comprehension of assigned materials both with and without the use of reading guides. Results of the study indicated that using reading guides had a significant impact on the reading comprehension of science textbook material with below-grade level readers in grade five. Phase two was an expansion of the first study and included fourth-grade students. As with the pilot study, results indicated a positive effect of using reading guides with science textbook materials. Phase three expanded the first two studies by using other fourth- and fifth-grade classrooms in three elementary schools in different counties and geographical regions.

The findings from this study suggested that reading guides may be used successfully with fourth- and fifth-grade students, as well as with middle and upper grade students. Most research on the use of guides has involved upper grade levels, rather than elementary.

These findings suggested implications for classroom practice. Researchers who have studied reading development are convinced that learning to read occurs in stages. Beginning around the fourth grade there is a shift from "learning to read," which is accomplished mainly through narrative text, to "reading to learn," which is accomplished mainly through expository text. Reading guides serve as a tool to help students transition from one stage to the next.

CHARACTERISTICS OF EFFECTIVE TEACHERS: PERCEPTIONS OF PRESERVICE TEACHERS

Ann Witcher, University of Central Arkansas, and
Anthony J. Onwuegbuzie, Valdosta State University

The purpose of this study was to determine preservice teachers' perceptions about the characteristics of effective teachers, as well as to investigate factors (e.g., gender, ethnicity, age, year of study, area of specialization, and parental status) that may have influenced their responses. Participants were 219 students attending a large mid-southern university. These students were administered a questionnaire asking them to identify, to rank, and to define between three and six characteristics that they believed excellent teachers possess or demonstrate. The majority of the sample was female (72.1%) and white (89.6%). Ages ranged from 19 to 50 (M = 24.2, SD = 6.1). With regard to year of study, participants were either juniors (46.0%), seniors (45.5%), or post-baccalaureate (8.4%). Nearly all students (94.7%) had attended a public high school, with the location of their schools being predominantly in either a suburban (39.6%) or a rural (43.7%) setting. Consistent with their backgrounds, the majority of students intended to teach either at a public-suburban school (39.5%) or at a public rural school (32.3%).

A content analysis of responses revealed several characteristics that many of the preservice teachers considered to reflect effective teaching. These included empathy, fairness, enthusiasm for teaching, knowledge of subject, behavior management skills, and instructional skills. Females tended to place more weight on personality skills as a measure of teacher effectiveness, whereas male students tended to cite more frequently the importance of classroom management and instructional skills. Perceptions also were related to year of study and schooling background. The implications of these findings were discussed, as were recommendations for future research.

2:00 p.m.-2:50 p.m. **Session T#027**	**RESEARCH METHODS** **(Discussion Session)**...	**Salon A**
PRESIDER:	Martha Peet, University of North Texas	

ELECTRONIC DECISION-MAKING: A POTENTIAL NEW METHODOLOGY FOR EDUCATIONAL RESEARCH

James E. McLean, M. Khris McAlister, Julio C. Rivera, and
Scott W. Snyder, The University of Alabama at Birmingham

Computer-mediated meeting technology (networked applications of decision software and integrated hardware) has proven to be useful for overcoming problems traditionally encountered when diverse stakeholders meet to address a need (lack of anonymity, group dominance, insufficient opportunities for discussion of proposals, etc). Computerized support for group processes is quite common in the business community. While there is a range of potential applications of such technology to program design and evaluation in education, there is little evidence of systematic application within the field. The purpose of this paper was to present an application of electronic decision making to an educational problem.

Data suggested that many students beginning kindergarten in a large southern urban area were not prepared cognitively or socially for a successful school experience. Twenty local stakeholders in early childhood were identified and invited to attend one of two sessions in a computer-mediated meeting technology laboratory. During each session, the participants were asked to identify the key characteristic of an ideal prekindergarten education program, rate the characteristics of the list of characteristics, and identify programs they felt best embodied these characteristics. Using networked microcomputers, participants contributed ideas and opinions on the prompts, simultaneously and anonymously, during electronic brainstorming.

Both groups arrived at similar key characteristics of effective prekindergarten programs and produced numerous examples of these programs. These data will be useful to participants in strategic planning. There was variability in the ratings assigned to the characteristics. Having more time for computer-based discussion of the ratings would have been useful for building a consensus about this issue. While this methodology has the potential to be an effective tool for conducting focus groups, strategic planning, and program evaluation, it needs to be studied in many more situations in order to optimize its benefit to the education.

USING A WORD PROCESSING PROGRAM TO CODE AND ANALYZE QUALITATIVE DATA

Charles L. McLafferty, Jr., The University of Alabama at Birmingham

Qualitative research frequently involves the analysis of reams of data in the form of transcripts, survey results, legal briefs, and other written material. Some specialized programs have been designed for, or adapted for use by, qualitative researchers such as Ethnograph, FolioViews, and HyperRESEARCH. Meanwhile, word processing programs have become far more sophisticated in the past few years. The qualitative researcher can use features such as tables, styles, color, comments, and hyperlinks to organize vast amounts of data. This presentation outlined ways in which features of Word97 (and Word2000) may be applied in qualitative research.

One approach to coding data using current word processing software is to use styles, which are formatting tables used to denote different styles of text. In qualitative research, styles can be defined to represent categories used to code data (instead of "Heading 1," "Heading 2," etc. the researcher can use categories; for example, "Administrative concerns," "Implementation of objectives," "Miscellaneous," etc.). Colors and/or formatting can be assigned to each style to distinguish between categories. In addition, macros can be used for sorting, to allow the researcher to review all occurrences of one or more categories.

In another approach, a transcript may be placed into a table, with multiple columns reserved for data coding. The resulting table can easily be sorted by column, to produce clusters of data corresponding to the level of coding. For example, a series of interviews with administrators could be placed in tabular form, with the first three columns used to code for identification, experience, and education level.

However, qualitative researchers should be aware of pitfalls of relying on a computer to code data. Ethical and philosophical concerns were mentioned in discussing the use of these techniques.

THE USE OF QUALITATIVE SOFTWARE, NUDIST, TO CONDUCT A SYSTEMATIC REVIEW OF LITERATURE

Melanie A. Bolt, Cecile D. Cachaper, and Jim C. Fortune,
Virginia Tech University

This study utilized a qualitative software package (NUDIST 1998, Version 4) to conduct a systematic review of literature of teacher-student interaction in diverse classroom environments. The impetus for this paper arose out of the need to organize and study a complex literature on diversity and teacher-student interaction more systematically. Generally, reviews of literature do not report the use of qualitative software packages to organize studies that are selected for review. However, qualitative software packages such as NUDIST allow researchers to systematically review a given area of interest. Too often, researchers seem to select articles for review based on their own deductions (or perhaps biases) rather than to examine a breadth of literature that should be analyzed in a systematic manner.

In light of a need for a more rigorous and systematic approach to reviewing literature, it was proposed that a qualitative software package such as NUDIST offers the following advantages over a more traditional approach: NUDIST (1) creates and manages categories, (2) easily conducts text searches, and (3) performs index searches. These applications of NUDIST (1998, Version 4) alleviate problems associated with more traditional approaches to reviewing literature. For instance, the sheer volume of articles may easily consume a researcher's desk and perhaps necessitate piles of index cards, folders, highlighters, and other categorizing devices, making the process of review tedious and time consuming. However, NUDIST can electronically store, categorize, and retrieve text with ease as was found in the present review of teacher-student interactions in culturally diverse classroom environments.

2:00 p.m.-2:50 p.m. **Session T#028**	**SCHOOL IMPROVEMENT** **(Symposium)** .... **Salon B**
ORGANIZER:	Mary H. O'Phelan, Western Kentucky University

GRADUATION 2010: A SCHOOL REFORM UTILIZING BRAIN BASED RESEARCH

Overview

Recent research breakthroughs regarding the organization and function of the brain have led to a greater understanding of windows of opportunity for maximizing learning. A committee of public educators and concerned citizens in a county public school system examined these findings, and recommended changes in eight areas: music, arts, foreign language, thinking skills, family involvement, health, reading/ language development, and community involvement. The result was Graduation 2010, an innovative program involving these eight areas. Presenters described the implementation of two strands and the ongoing research and evaluation. Problems encountered and lessons learned were discussed. The audience was encouraged to share ideas and join the discussion.

The Chess Curriculum

Brenda Hauser and Cathy Willis, Daviess County (KY) Public Schools

One facet of the thinking skills component of Graduation 2010 is the use of chess in the early grades to develop critical thinking and problem solving. This presentation described the development of a curriculum focused on incorporating chess into the instructional programs targeted for primary and intermediate level students.

The Fine Arts Curriculum

Marilyn Mills, Daviess County (KY) Public Schools

The Goals 2000: Educate America Act recognizes the arts as part of the core curriculum. Graduation 2010 is utilizing the arts to stimulate and facilitate academic learning. This presentation described and discussed the artistic components of dance, theatre and the visual arts, including attendance at performances, art, and art history in the fourth and fifth grades, and the Artist in Residence exposure for grades 2 and 3.

A Qualitative Analysis of Teachers' Reactions

Antony D. Norman, Mary H. O'Phelan, and Gayle W. Ecton, Western Kentucky University

To assess the relationship of school climate and the effectiveness of the program, elementary teachers responded to a culture audit survey. The researchers met with the faculty of each school to present audit results and to discuss issues related to Graduation 2010. Qualitative analyses of these interviews were presented, including teachers' views on the importance of Graduation 2010, strengths and weaknesses, and perceived changes in students since the beginning of the program.

Implementation: Year Two

Antony D. Norman, Mary H. O'Phelan, and Gayle W. Ecton, Western Kentucky University

Data collection on implementation of Graduation 2010 for year two consisted of a survey for principals aimed at measuring the extent to which the various strands of the program have been implemented. The second-year survey was modified to include additional goals, or to exclude goals seen as no longer viable, and distributed to all elementary principals at the end of the second year of implementation. Results were presented and compared with those of year one.

Lessons Learned

Nicholas Brake, Daviess County (KY) Public Schools, and Gayle W. Ecton, Western Kentucky University

Graduation 2010 has received regional and national attention, and hundreds of guests have visited the district in recent months. Perceptions of the program of those connected with the school system may be different from perceptions of those outside the school system. This presentation focused on the anomalies evident in the data, public relations issues, and how the school district is fine-tuning the program with the lessons learned.

2:00 p.m.-2:50 p.m. **ACHIEVEMENT AND MATH EDUCATION**
Session T#029 **(Discussion Session)** .... **Salon C**

PRESIDER: Sue S. Minchew, Mississippi State University

USING MULTIPLE REGRESSION ANALYSIS TO EVALUATE ALGEBRA ACHIEVEMENT IN A STATE'S PUBLIC SCHOOLS

Charles W. Davidson, The University of Southern Mississippi

There is a large difference among school districts of most states in the educational orientations of the families of the districts' students. Few educators would dispute the relationship between the educational orientation of families and the academic achievement of the children of those families. In Mississippi, these differences result in a potential inequity to many school districts because the school districts are accredited, to a large extent, on the basis of the academic achievement of their students. The purpose of this study was to evaluate the algebra achievement of the school districts in the state of Mississippi while taking into consideration selected school district variables.

The subjects for the study were the 152 school districts in the state of Mississippi. The data were obtained from the 1999 Report on Mississippi's Public School Districts for the 1997-98 school year published by the Mississippi Department of Education. The criterion variable for this study was the scores on the State Algebra I test, which was designed to assess the effectiveness of instruction in Algebra I in each school district. The predictor variables were: the percentage of students eligible for free lunch, the pupil/teacher ratio, the percentage of students ages 5-21 assigned to special education, the total per pupil expenditure, the mean district ACT score, and the percentage of students who take ACT core course work. Multiple regression analysis was used to develop a prediction equation from which a residual was computed for each school district.

The predictors in the equation accounted for 50% of the variance. The school districts with the greatest positive residuals were deemed to be the best, and those with the greatest negative residuals were deemed to be the worst.

USING THE INTERSPERSAL TECHNIQUE WITH OFF-TASK BEHAVIOR

Merilee McCurdy and Christopher H. Skinner, Mississippi State University

In this study, the interspersal technique was used to decrease off-task behaviors exhibited in the classroom. The interspersal technique is implemented by altering a regular classroom assignment worksheet to include additional, brief problems. The easier, brief problems are interspersed throughout the worksheet about every fourth problem. In past research, students have been found to prefer the interspersal worksheets, while their accuracy during completion has not been effected. Because of this student preference, it has been hypothesized that the interspersal technique would be useful to decrease off-task behaviors. However, this hypothesis has not been empirically investigated. Therefore, the purpose of this study was to examine the effectiveness of the interspersal method in decreasing off-task behaviors in the classroom.

The participant in this study was an eight-year-old African American female in a fourth-grade classroom. Susan was given the regular worksheet on one day and an interspersal worksheet the next day. This method was repeated until a constant trend was revealed (12 days). Therefore, an alternating treatment design was used. Results indicated that the interspersal worksheet was useful in decreasing off-task behavior for Susan. The data series for the regular classroom worksheet indicated higher levels of off-task behavior than did the data series for the interspersal worksheet. Graphs were provided. Future research should focus on additional replications with multiple populations of students.

AN EVALUATION OF THE EFFECTIVENESS OF AN ELEMENTARY SCHOOL MATHEMATICS CURRICULUM

Ann Arnold Adams, Leflore (MS) County School District

The study examined the mathematics achievement of elementary school students to determine whether a newly-developed district mathematics curriculum taught by trained teachers was more or less effective than the curriculum that was currently being used.

A non-random group of 13 teachers who had been trained in using the new curriculum was selected to teach the new curriculum to their students. After eliminating kindergarten because pretests were not administered at that level, there were 10 experimental teachers and classes remaining in the study. The control group was comprised of all other teachers in the participating schools who taught at the same grade levels as the experimental teachers. Therefore, the control group of 29 teachers and their classes were larger than the experimental group. Teachers in the control group continued to use the curriculum that was already in place. Pretests and posttests, using the Iowa Tests of Basic Skills for mathematics, were administered to students in both groups.

The tests were administered following the standardized, highly secure procedures developed and regulated by the Mississippi Department of Education. Individual scores were analyzed, using an analysis of covariance. Pretest NCE's were the covariate, and posttest NCE's were the dependent variable. Both group type and sex were considered. An outside evaluator, PREPS (Program for Research and Evaluation in Public Schools) of Mississippi State University, was used.

There was a significant difference between the experimental and control groups, $p > .001$. There was no significant difference between male and female students, $p = .843$. There was no significant interaction of group by sex, $p = .301$. The conclusion of the study was that students in the experimental group, taught by trained teachers, scored higher in mathematics NCE's than students in the control group, whose teachers did not use the new curriculum and had not been trained in using it.

2:00 p.m.-2:50 p.m. **COLLEGE STUDENTS**
Session T#030 **(Discussion Session)**.. **Salon D**

PRESIDER: Jane Nell Luster, Louisiana State Department of Education

ADDRESSING THE NEEDS OF WOMEN IN SCIENCE, MATH, AND ENGINEERING: A REVIEW OF THE LITERATURE

Glennelle Halpin, Jennifer M. Good, and Gerald Halpin,
Auburn University

Relative to the number of men who decide to become scientists, mathematicians, and engineers, few women pursue those particular professions. When first enrolling in science, math, and engineering programs, women encounter difficulties for which they had not prepared themselves. Hence, it is important to understand the factors that confront women when they choose to pursue science, math, and engineering professions, factors that potentially impede their success in their college careers. Once a thorough understanding of these barriers has been acquired, educators can effectively plan interventions that will increase the retention and matriculation of women in scientific courses of study.

Beginning first with the landmark study by Seymour and Hewitt, which addresses why undergraduates leave the sciences with specific emphasis on gender, the researchers systematically explored the literature in order to discover information on the following themes: barriers to the success of women in science who have ultimately succeeded in their disciplines, an exploration and descriptions of the current programs that exist to help retain women in science programs, and a critical review of the evaluations assessing the effectiveness of these programs.

Identified were common experiential factors, such as a sense of isolation, a struggle with understanding gender roles, a decrease of academic self-confidence, and a lack of role models in the field, that discourage the persistence of women in the engineering and science/math fields. The literature indicated that most retention programs aim at changing qualities of the females themselves rather than recognizing that institutional barriers exist. The implications of this study were that educational administrators need to shift the focus of their efforts to consider instead changes in curriculum, pedagogy, and climate if they hope to retain females within the science, math, and engineering professions.

MYERS BRIGGS TYPE INDICATOR DIFFERENCES: A COMPARISON OF COLLEGE FRESHMEN IN 1975 AND 1993

Lee Thomas, Glennelle Halpin, Gerald Halpin,
and Edith Miller, Auburn University

Engineering students matriculating at a land-grant university in the south in 1975 were compared to their counterparts matriculating in 1993 on the Myers Briggs Type Indicator (MBTI). Examined were the interaction effects and main effects of sex and year of entry using the continuous MBTI scores on the four scales of extraversion-introversion, intuition-sensing, thinking-feeling, and judgment-perception.

Results showed that the student group entering in 1993 was more thinking and perception oriented, whereas the student group entering in 1975 was more feeling and judgment oriented. The males were more thinking and perception oriented, whereas the females were more feeling and judgment oriented.

Strategies for teaching and learning based on the results of this study were presented.

PURSUING HIGHER EDUCATION: ARE THERE GENDER DIFFERENCES IN THE FACTORS THAT INFLUENCE INDIVIDUALS TO PURSUE HIGHER EDUCATION?

Sandra M. Harris, Auburn University

The purpose of this study was to investigate gender differences in the factors that influence a person's decision to pursue higher education. The measures of interest were self-efficacy, locus of control, parental support, family support, peer influence, relative functionalism, glass ceiling effect, secondary school support, preparation for college, and financial aid concerns as measured by the Factors Influencing Participation of Higher Education (FIPHE) Questionnaire. Additional measures of interest were mother's and father's influence, personal degree expectation, and mother's and father's degree expectations.

Participants were college students enrolled at a large, traditional land-grant university during the 1998 fall quarter. Participants were recruited through course instructors from a general studies psychology course and from several sections of an educational psychology course. Each instructor read an announcement that detailed the requirements for the study. Participants completed the questionnaires at home and returned them either to their instructors or to a place designated by the researcher.

A cross-tabulation and chi-square analysis revealed that males and females differed on nine of the 32 demographic variables. A multivariate analysis of variance revealed significant gender differences on six of the 10 scales of the FIPHE Questionnaire and on four of the five additional measures of interest. The results tended to favor females. The findings of the study suggested that factors that influence individuals to pursue higher education may be different for females than for males.

2:00 p.m.-2:50 p.m. **TEACHER EDUCATION**
Session T#031 **(Display Session)**.. **Salon E**

RESTRUCTURING TEACHER EDUCATION: CREATING A PROFESSIONAL DEVELOPMENT SCHOOL OR A PROFESSIONAL DEVELOPMENT ACADEMY

Victoria McLain, Marymount University, and
Jane McHaney, Kennesaw State University

Current restructuring movements in teacher education advocate an intense internship for prospective teachers. The Professional Development School and Professional Development Academy provide the setting for this internship while encouraging collaboration between schools and universities. Teacher educators are the key players in this reform and restructuring.

For teacher educators to successfully prepare preservice teachers for the twenty-first century, it is necessary to rethink current teacher education programs. The Professional Development School and Professional Development Academy are two possible models for this reform. Preservice teachers are immersed in diverse experiences under intensive supervision where continuous modeling and mentoring provide them with opportunities to learn best teaching practices.

This display session examined two current teacher-education models--the Professional Development School (PDS) and the Professional Development Academy (PDA)--that have been implemented successfully at two universities over the last five years. The PDS is an undergraduate licensure program at a state institution in Georgia, and the PDA is a graduate licensure program at a private institution in Virginia. The display session included the following: (1) an overview of the Professional Development School (PDS) undergraduate model at

Kennesaw State University, (2) an overview of the Professional Development Academy (PDA) graduate model at Marymount University, (3) specific steps and guidelines for implementing both models, and (4) examination of the roles of the "key players" involved in establishing a PDS or a PDA, (5) examination of coursework and clinical field experience at the two universities, and (6) comprehensive packets that include detailed information for implementing both models.

The display session utilized discussion by presenters of the session topic, opportunities for questions by conferees, and a variety of displays, examples, and handouts.

DEVELOPING CONSCIOUSNESS: AN INNOVATIVE MODEL OF ELEMENTARY TEACHER EDUCATION IN REVIEW

Sunya T. Collier, Georgia State University

The purpose of this presentation was to follow through on a presentation made at the 1998 Mid-South Educational Research Association annual meeting, which described an innovative model of undergraduate teacher education. In an effort to extend the previous conversation, this presentation highlighted the pilot year findings. Participant field data narrative, focus group interview, and survey methods provided both qualitative and quantitative data.

A distinguishing feature of this program is that students begin and end the program as a cohort and collaborate with three university professors and five cooperating teachers throughout. Specifically, preservice teachers experience a curriculum that is recursive, integrated, and appropriate to sequential grade level field placements (preschool through fifth grade; suburban, urban, and multicultural).

Research analysis from the pilot year suggested the following conclusions. Preservice teachers (n=20) developed increasingly more sophisticated observation skills and elevated consciousness; that is to say, participants' focused interaction with children at every age led to a keen self-awareness of their beliefs about how children learn. Multiple opportunities to review and confront their observations and hunches through dialogue with peers, cooperating teachers, and professors, helped them develop an awareness about how they planned to teach. Participants developed independent thinking skills in the company and support of fellow learners, thus also aiding their awareness of the importance of community in learning. They began to speak for themselves, to articulate and refine their theories of practice. Not only were participants able to convey their thoughts to others, they were also able to support their beliefs with classroom-based experience, research findings, and theory. By establishing self-monitoring activities early in the program and supporting them through regular community conversation, teacher educators were able to promote preservice teacher awareness of themselves as learners and to help them acknowledge, hear, and listen to their own voices as developing teachers.

ISSUES CONCERNING MULTICULTURAL EDUCATION: PRESERVICE TEACHERS' AND TEACHER EDUCATORS' PERCEIVED LEVELS OF KNOWLEDGE

Pamela A. Taylor, Mississippi State University

There is a call for preservice teacher education programs and teacher educators to make multicultural education a curricular priority by assessing the needs of prospective teachers and fulfilling those needs. Multicultural education is the term most often applied to educational programs designed to study concepts that deal with race, culture, language, social class, gender, and disability. Multicultural education is a mechanism by which teachers can recognize, accept, and affirm diversity. The first step in affirming diversity is by having knowledge of the issues.

The purpose of this study was to assess the level of knowledge about issues concerning multicultural education of preservice teachers and teacher educators. The subjects for this study consisted of 78 preservice teacher education students enrolled in a Foundations of Education course. These subjects represented a sample of convenience. The subjects completed the Multicultural Knowledge Test (MKT), a 35-item, seven point Likert-type response format measure of topics and issues central to general multicultural education knowledge. At the same time, 45 teacher educators volunteered to participate in this study, by also completing the MKT. The responses were analyzed with a one-sample *t*-test, with a test value of 4.00, an average knowledge level. Preservice teachers' mean score (M = 3.08) was significantly below average, and teacher educators' mean score (M = 3.93) was practically average. The session displayed tables representing the data analysis by group. Tables detailing the data analysis by issue were also displayed. Finally, an independent *t*-test was used to compare the groups' responses and tables illustrating these comparisons were also displayed.

The results revealed that teacher educators had higher mean scores than preservice teachers about issues central to multicultural education, $t(121) = 4.62$, $SE = .19$, $p = .000$. Notwithstanding, there appeared a need for preservice teachers and teacher educators to increase their knowledge levels.

TASTY (AND OTHER) TIPS FOR TEACHING ASSESSMENT

Judith A. Boser and Russell French, The University of Tennessee, Knoxville

Classroom teachers are expected to be able to administer and interpret the results of standardized tests, select the appropriate type(s) of assessment measures for use in their classrooms, construct and implement assessments, develop grading systems, provide input into various types of decisions affecting curriculum and their students, and communicate with parents and others. Many public school teachers have not had coursework on assessment. For those who did have such coursework, the content varied, and some completed it before the current emphasis on "performance assessment" became widespread. Both preservice and current teachers are increasingly expected to possess assessment skills to facilitate the learning of their students in this age of accountability.

This display offered some strategies used by the authors in the teaching of an assessment course for teachers and preservice teachers. The authors found that utilizing activities, materials or props, and "edibles" can enhance student attention and seemingly facilitate their learning (even for the mathematically challenged). In some cases, class activities and sessions provided a learning laboratory atmosphere.

Those visiting the display were offered the opportunity to participate by writing down and sharing teaching strategies of their own, which the presenters subsequently compiled and disseminated to those who were interested.

2:00 p.m.-2:50 p.m. **COGNITIVE DEVELOPMENT**
Session T#032 **(Training Session)**..**Salon F**

TRAINERS: Vincent McGrath and Jack G. Blendinger, Mississippi State University

LEARNERS FOR NEW TIMES: REFLECTING ON SCIENTIFIC AND MORAL STAGES OF COGNITIVE DEVELOPMENT

This training session was for all educators concerned with how people develop assumptions and concepts of justification from their experiences. Focus was on the coherentist model of reflective thinking as a corollary to all learning. Emphasis was placed on identifying those thinking protocols typical of learners at various stages in their intellectual and emotional development. Current research reflects that when educators recognize that the language of justification is framed by sociopsychological and genetic forces and these positions vary little over time, then educators can design practical lessons that match learners' structured views of the world and the possibility for change. The presenters focused on the process by which individuals struggle to create defensible judgments about vexing real life problems.

Participants made applications based on reflective judgment models and developed strategies to stimulate thinking and promote a safe learning climate for open discussion of difficult social problems that individuals encounter daily. Participants discussed the possibility for dialogue about how individuals use knowledge to justify their views of ill-structured problems, problems for which there are no right or wrong answers. When teachers revisit the recent research on cognitive and moral stages of development, they become sensitive to certain invariant thinking constructs.

Participants discussed reflective thinking interview protocols by which learners perceive and attempt to solve ill-structured problems. They discussed the value of reflective judgment models as common measures of thinking when compared to formal operations, post-formal reasoning, and critical thinking practices. Presenters shared model responses from students to ill-structured problems to show how students typical of an age group respond to open-ended questions and how they justify their responses.

3:00 p.m.-3:50 p.m. **BEHAVIOR**
Session T#033 **(Discussion Session)**.. **Salon A**

PRESIDER: E. Jean Newman, University of South Alabama

BEHAVIOR PROBLEMS IN CHILDREN IMPACTED BY MATERNAL DRUG ADDICTION

Nicola A. Conners, Leanne Whiteside-Mansell, Patti Bokony, and Cynthia C. Crone,
University of Arkansas for Medical Sciences

Current research suggests that children who have been prenatally exposed to alcohol or other drugs, or who have been reared in an environment characterized by maternal addiction, may be at risk for developing behavior problems. However, research in this area is limited, and has produced mixed results.

The purpose of this study was two-fold: (1) to examine the prevalence of behavior problems among children whose mothers were addicted to alcohol or other drugs, including comparing the behavior problems of children who were prenatally exposed to drugs and children who were not prenatally exposed, and (2) to examine the impact of a comprehensive substance abuse treatment program for parenting women on the behavior problems of children enrolled in treatment with their mothers.

The problem behaviors of 50 children enrolled in the treatment program were assessed using the Problem Behavior Scale of the Scales of Independent Behavior-Revised. Twenty-nine percent of children scored out of normal range on the overall maladaptive behavior index. Multivariate procedures were used to examine initial and across-time behavior scores to assess the impact of prenatal exposure to alcohol and other drugs, and to examine intervention effects. Maternal, child, and program characteristics were also examined. Study results suggested that prenatal exposure to alcohol or other drugs did not have an automatic impact on children's behavior, indicating that other factors in the environment of a child may play a larger role in determining their risk for developing behavior problems. The results also suggested that a limited intervention may not be effective in reducing behavior problems in children impacted by maternal addiction. Implications for educators and treatment providers were discussed.

EFFECTS OF AN INTERVENTION MODEL ON SECOND-GRADE STUDENTS EXHIBITING INAPPROPRIATE BEHAVIOR TOWARD AUTHORITY FIGURES

Kelly K. Martin and Patrick Kariuki, Milligan College

The purpose of this study was to examine the effects of an intervention model on second-grade students exhibiting inappropriate behaviors toward authority figures. The sample for this study consisted of 20 second-grade students from an already established classroom in a rural, northeast Tennessee school district. Data collection was primarily through observations of the classroom on five target behaviors during specified times. Data were analyzed using both a paired samples *t*-test and an independent samples *t*-test. Results of the paired samples *t*-test indicated a significant difference in student behavior toward authority figures with the implementation of the behavior intervention model. The Independent Samples *t*-test indicated a significant difference in student behavior between males and females. The findings of the study indicated that the behavior intervention model could be used as a tool to decrease the number of behavior infractions toward authority figures.

A LOOK AT A NEUROLOGICAL/GENETIC PERSPECTIVE AS THE MAIN ETIOLOGY OF THE DISORDER KNOWN AS ATTENTION DEFICIT DISORDER/ ATTENTION DEFICIT HYPERACTIVITY DISORDER

Madeline (Kay) Grantham, Mississippi State University

This paper explored the history of the neurological etiology of ADD/ADHD, current neurological and genetic research in this area, implications for diagnosis and treatment, and conclusions that are relevant to the current study and future studies into the etiology and treatment of ADD/ADHD. Although environment must always be considered, results of this research indicated that genetic and neurological research could lead to different methods for the identification and treatment of this disorder. It was the main consensus of many of the researchers that ADD/ADHD must be treated with a combination of medication (when needed), parent education, and family counseling.

3:00 p.m.-3:50 p.m. **ACHIEVEMENT, RESEARCH METHODS AND SCHOOLS**
Session T#034 **(Discussion Session)** .... **Salon B**

PRESIDER: Jerry Brooksher Gee, Nicholls State University

STATE OF ARKANSAS SCHOOL DATA REPORTING: A SURVEY OF SCHOOL SUPERINTENDENTS ON THE USEFULNESS AND DIFFICULTIES OF REPORTING

Robert L. Clowers and Larry R. Dickerson,
University of Arkansas at Little Rock

The study surveyed all superintendents of public school districts in Arkansas about the reports they are required to submit to the state's Department of Education. Superintendents were asked to indicate the usefulness of reports, the difficulty of collecting data for reports, and the difficulty of submitting the reports electronically as now mandated by the state.

A survey instrument was used to collect data. The surveys were mailed in spring 1998 to each public school district superintendent; 206 of Arkansas 311 superintendents responded. In addition to rating the usefulness, and difficulty in data collection or electronic reporting, the survey inquired about specific data-related problems. Response items were based on interviews with state department administrators, superintendents, and representatives from educational associations. The instrument was pilot tested.

To demonstrate that the population surveyed was representative of all public districts, nine comparison variables were used to contrast responding districts with all public school districts (*t*-test). Descriptive statistics and MANOVA were used to identify differences in reports rated by superintendents. Qualitative methods were also used.

Reports found to be of greatest use were primarily financial. Reports found to be of little use included compliance reports. Reports for which the data were most difficult to collect, and specific problems related to data collection or electronic submission of reports were identified.

Superintendents often cited unclear reporting instructions as a major problem with the efficient collection and submission of reports. Superintendents were found to be forward looking; they used information to project needs or anticipate problems. They viewed the state's use of reports as primarily one of legislative compliance. Elimination of duplicate reporting, providing access to smart databases, and revised data definitions agreed upon by school districts and the department of education could lead to both sides making greater and more efficient use of the data collected.

DROPOUT RATES IN LOUISIANA: MEASURING THE IMPACT OF FOUR DEVIATIONS FROM FEDERAL REPORTING GUIDELINES

Susan Kochan-Teddlie, Xiujuan (Susan) Yuan, and
Bobby Franklin, Louisiana Department of Education

Though the National Center for Education Statistics (NCES) has included dropout data in its Common Core of Data since 1991-92, it is acknowledged that dropout reporting practices differ from among states. The perceived incomparability in reporting has fueled concern over the accuracy of the national dropout rate and a downward trend in dropouts during the 1990s (NCES, 1997).

Though staff from NCES believe that states largely conform to the NCES dropout definition, they have identified four ways in which states tend to deviate from reporting guidelines: inclusion (in dropout counts) of students who leave school during the summer (i.e., non-reported summer drops), inclusion of students who leave elementary/secondary settings to enter adult education (and pursue the GED), incorporation of nongraded students of high school age in reported dropout counts, and exclusion from final dropout counts of students who reenrolled in school the following year.

Federal researchers can speculate what impact each reporting difference might have on a state's dropout rate, because they lack the student-level data necessary to test the effect of each difference. The Louisiana Department of Education administers a student-level data collection system capable of (1) meeting the NCES dropout definition in full and (2) testing the impact that each deviation would have on dropout rates for the state as a whole and for targeted subgroups of children.

The paper focused on findings from a state-level analysis of 1997-98 Louisiana dropout data. It described the various dropout rates produced were Louisiana analysts to adhere strictly to the federal reporting requirements, or to deviate in one or more ways from the federal requirements. These findings should prove relevant to ongoing federal efforts to estimate what the national dropout rate might be if states implemented the full definition.

CORRELATES OF SCHOOL ACADEMIC SUCCESS: A STATE REPORT CARD STUDY

Jerry G. Mathews, Auburn University

This study was conducted using data from a state accountability school report card to characterized group differences in bivariate and multivariate relationships between school quality indicator variables and academic status in high SES and low SES schools. The question of interest was whether or not the report card provided relevant information, other than the results of standardized testing, for school improvement in low achieving, low SES schools.

Thirteen-hundred nineteen schools in 127 school districts were available in the data that were extracted from a world-wide web page and represented all the schools in the state. Bivariate correlations, discriminant analysis, and Fisher's *zr* were used in the analysis. Bivariate correlations were used to reduce 15 initially identified indicator variables to one grouping variable, academic status, and eight predictor variables. Cross validation procedures were used to correlate a weighted combination of eight indicator variables with the dichotomously scored outcome variable, academic status for both low and high SES schools. The correlation coefficients were converted to Fisher's *zr* to correlate the eight indicator variables with academic status.

The results revealed that SES moderates the relationships between the eight indicator variables and academic status for the low SES schools than for the high SES schools. The variables representing achievement ability, attendance, funding, and teacher certification provided significantly more information about the academic status for the low SES schools than for the high SES schools.

3:00 p.m.-3:50 p.m. **COLLEGE STUDENT ACHIEVEMENT**
Session T#035 **(Discussion Session)**.. **Salon C**

PRESIDER: Roberta Benton, Bishop State

HIGH SCHOOL AND COLLEGE GRADES: IS PAST PERFORMANCE A PREDICTOR OF FUTURE PERFORMANCE?

John Fletcher, Gerald Halpin, and Glennelle Halpin,
Auburn University

Student attrition from institutions of higher education has long been a concern. This loss impacts not only the individual and the institution but also the world of work and society at large. An understanding of factors related to student persistence is needed. Considered in this study were both high school and college grades used as predictors of advancement in and graduation from a professional college program.

Participants were 868 students matriculating in the pre-engineering program at a major land-grant university. Obtained from institutional records were high school grades, college first-quarter GPA, status regarding advancement in the engineering program of study, and graduation status.

Math and science high school grade indices were significantly correlated (.155 to .437) with grades in 15 college courses. A humanities index was significantly correlated (.241 to .426) with 14 of the 15 college courses. All three indices were significantly higher for students who advanced in the engineering program of study, with the math index having the strongest relationship (Eta = .423). Likewise, first-quarter college GPA was significantly higher for students advancing with Eta being .639.

All three high school grade indices as well as the first-quarter college GPA were significantly different for those students graduating with a degree in engineering versus those who did not. The relationship between grades and graduation was stronger for college GPA (Eta = .454) than for the high school grade indices (Eta = .210 for math, .205 for science, and .158 for the humanities).

Results from this study shed light on the areas of study in high school that were related to performance in first-quarter college classes. First-quarter college GPA, in turn, was the most significant predictor of advancement in a professional program of study and, ultimately, to graduation. Discussed were the implications of these findings for recruitment and retention.

RELATIONSHIP BETWEEN GRE AND OTHER VARIABLES IN GRADUATE EDUCATION

Jwa K. Kim, Akari Yamagami, Donald L. Curry, and Kristy Warren,
Middle Tennessee State University

One of the main limitations in the study of GRE and related variables has been the restricted range of the GRE scores. The range of GRE scores for students who have already been accepted into graduate programs is restricted because of the minimum requirement of the GRE score for most graduate programs. The sample adopted for this study was drawn from the graduate program at a regional university in the southeast. This sample, with a total of 284 graduate students who have finished their master's degree between 1992-98, had a wider range of the GRE scores (GREV: 270 - 790 and GREQ: 240-780) than most samples utilized by other studies.

Analysis showed that the linear combination of GREV and GREQ is a weak predictor of the Graduate Grade Point Average (GGPA), explaining less than 14% of the variance in GGPA (R} = .137) although it is a significant predictor of GGPA, F (2, 281) = 22.25, p = .0001. Unlike findings from other studies, the goodness-of-fit index (R}) of the regression line with GREV and GREQ for GGPA form the first 18 credit hours dropped to less than 11% (R} = .104). Further analysis revealed that GREV is a stronger predictor of GGPA than GREQ among female students, whereas the opposite is true among male students. It was also found that the predictability of GREV and GREQ for GGPA depended on the students' major field. Among major fields with a reasonable sample size (i.e., n > 80), the regression of GGPA on the linear combination of GREV and GREQ had higher predictability among Education majors than Social Sciences majors.

This study was in accordance with previous findings in that the regression line utilizing GREV and GREQ to predict GGPA had at best mediocre predictive validity. Developing a separate regression line for each major field resulted in better fitting than a regression line from the total group.

DIFFERENCES IN DROPOUT PRONENESS SCORES OF THREE GROUPS OF COLLEGE STUDENTS

Kathy Autrey, Neelam Kher, Steve Horton and
Susan Molstad, Northwestern State University,
and Gayle Juneau, University of West Florida

Colleges with open enrollment policies often admit students who may be underprepared for college level coursework. One strategy adopted by colleges to strengthen students preparation is to offer developmental courses in Mathematics, reading and English.

Clearly, underprepared students are at risk for dropping out of college. Thus, the purpose of this study was to determine if three groups of students-completers, nonsuccessful completers and noncompleters of a developmental math course-were significantly different in terms of dropout proneness scores on the College Student Inventory.

Data from 684 students enrolled in developmental math during one semester were used in this study. Of this number 402 students met the selection criteria and their scores on the College Student Inventory were used in the data analysis. There were 251 successful completers, 89 nonsuccessful completers and 62 noncompleters. Of the 402 students, 65% were Caucasian, 27% were African American, and 8% were classified as "other."

Data were analyzed using ANOVA with completion status as the independent variable and dropout proneness score as the dependent variable. The ANOVA was significant at $p<.01$. Tukey's multiple comparisons were used to identify specific group differences in dropout proneness. Nonsuccessful completers had a significantly higher score on the dropout proneness scale than successful completers.

The findings of this study suggested that colleges must seriously consider their responsibility to students who take developmental courses. Faculty and advisors can play a pivotal role in encouraging student success in developmental math courses, thereby enhancing students' chances of successfully completing college work.

3:00 p.m.-3:50 p.m. **READING**
Session T#036 **(Discussion Session)**... **Salon D**

PRESIDER: Carolyn Woods, Harrison County (MS) School District

THE EFFECTS OF REINFORCEMENT ON READING RATE OF COMPREHENSION

Jennifer T. Freeland, Bertha Jackson, and Christopher H. Skinner,
Mississippi State University

If students could learn to read quicker and answer more comprehension questions correctly, it would take less effort and time for the student to complete a reading assignment that may strengthen the student's functional reading skills.

This study was conducted to determine if reinforcement could increase reading comprehension rates. Rate of comprehension was calculated by multiplying the percentage of comprehension questions answered correctly by 60 and dividing this by the number of seconds required to complete a reading passage by 100. Four students in secondary special education participated in this study. Sessions were conducted daily.

During the baseline phase, students were required to silently read a passage and to raise their hand when they had finished reading. Students were then asked to answer 10 comprehension questions (five fact and five inference questions). Students were timed with a stopwatch during their reading. The students read three passages each session, and the median score was then graphed by the experimenter. During the reinforcement phase, conditions were identical except that, before the session began, the experimenter told the students that he or she would be able to earn points if they read faster and answered as many questions as they could correctly. Once a student reached 500 points he or she was allowed to trade points for small rewards. In the bonus phase, students were able to earn up to 200 extra points for answering at least five out of 10 questions correctly.

A multiple baseline design was used to determine the effectiveness of the reinforcement of rate of comprehension. After three of the students exhibited a decreasing trend in the baseline phase, their percentage correct increased with the implementation of the intervention.

Additionally, the students' rate of comprehension increased somewhat with the implementation of reinforcement.

A SINGLE CASE STUDY OF THE INFLUENCE OF DYSLEXIA ON MARITAL RELATIONSHIP: FINDING A SOLUTION OR BLAMING THE VICTIM

Stephen J. Obringer and Mary Sands, Mississippi State University

It is estimated that 30 million individuals in the United States have dyslexia. Some professionals do not acknowledge its existence. Some claim that children outgrow it by the time they reach adulthood, while others claim to have developed a cure. However, genetic experts have found that dyslexia does exist, is genetic in origin, and is very likely caused by an aberration in chromosomes six and 15.

Dyslexia is a medical condition resulting in a severe reading disorder, presumably as a result of neurological dysfunction and is developmentally intrinsic in nature, differentiating it from reading problems due to extrinsic or environmental factors. A 10-year longitudinal study indicated that dyslexia is a lifelong deficit. This means that children with dyslexia grow up to be adults with dyslexia.

The purpose of this study was to thoroughly investigate the difficulties experienced by a married couple, where one partner is a "closet dyslexic." Closet dyslexics are characterized by knowing that they are dyslexic but concealing this from themselves through denial and from others out of shame or fear. By hiding their dyslexia they end up misunderstanding their own condition and its associated characteristics.

Information collected for this study was gathered through a qualitative approach consisting of structured interviews with a non-dyslexic male who was married to a female previously diagnosed with dyslexia. Several interviews were conducted in person and then over the phone for follow-up questions to any ambiguous responses. This method helped establish rapport since many questions were emotionally sensitive. The results indicated that major impediments to the marriage fell into social, emotional, and academic related problems. The impediments discussed in this paper include: time management, social cues, money management, sequencing activities, memory and following directions.

SHAPING READING PERSISTENCE IN A CLIENT WITH CHRONIC SCHIZOPHRENIA

Christopher H. Skinner, Mississippi State University, and
Amy L. Skinner, Mississippi University for Women

Educators and researchers have become interested in assessing and enhancing the recreational and leisure skills in clients with disabilities. Enhancing the leisure skills of adults with mental illness may enhance clients mental and physical well being (Browder & Belfiore, 1991). Reading is both a functional skill and a leisure skill. In the current study, an adult with chronic schizophrenia indicated that he used to enjoy reading but could no longer read. Thus, the client and the primary researcher developed a shaping program designed to increase the client's reading persistence. The program itself was designed to reflect typical leisure reading conditions (i.e., the client to chose when, where, and what he would read). Furthermore, the program was designed with gradually increasing reading requirements that decreased the probability of the client experiencing failure as his reading skills were improved.

A changing criterion design was used to evaluate the effects of the shaping program on the client's reading persistence. During a five-day baseline phase, the client read a page on one day and about 25% on another day. The client and the primary experimenter co-developed a shaping program A shaping program was then introduced, and the client's reading persistence was gradually increased to the point where he read six to eight pages continuously each of the last eight days of the experiment. Furthermore, throughout this experiment the client read across settings, times, experimenters, and material. About seven weeks after the program was halted, an unplanned opportunity to collect maintenance data showed that the client maintained this enhanced reading persistence. Results were discussed in terms of using shaping programs to enhance leisure skills.

3:00 p.m.-3:50 p.m. **DRUG EDUCATION, SCHOOL VIOLENCE, AND COGNITION**
Session T#037 **(Display Session)**.. **Salon E**

WARNINGS FROM THE FIELD: A PRESERVICE STUDY OF STUDENT TEACHERS' SCHOOL VIOLENCE PERCEPTIONS

Barbara N. Young and Dorothy V. Craig,
Middle Tennessee State University

Teaching depends on quick instinctive habits and behavior and deeply held ways of seeing, perceiving, and valuing. This project used the basis of "perceptions" to examine data on school violence and then, in turn, used that data to assist preservice students as they entered the field of education.

This session offered results from a project that examined perceptions of school violence among a variety of school populations: elementary, middle, and high school students; teachers in grades 5-8; and (1) preservice students preparing to teach in public school settings; and (2) how these results were utilized in preservice classes to assist students preparing for student teaching.

A survey instrument was designed from three separate instruments previously used in three different settings. The instrument was administered over a period of six months---onsite and on campus. Results from the survey showed distinct variations in perceptions of school violence between those teaching and preparing to teach at the elementary, middle, and high school in addition to large variations among those teaching and preparing to teach in rural, suburban, and urban settings.

Data and demographic information were compiled and analyzed into a "readable" format that was shared and incorporated within preservice classes in order to assist students with lesson planning, classroom management techniques, discipline plans, field placements, and student teaching experiences.

An outline of the strategy used to incorporate results from the study into the methods and management courses was provided to participants in the form of outline of procedure, course syllabi, field placement requirements, and student reflections from the student teaching experience.

HEMISPHERICITY MODES, LEARNING STYLES, AND ENVIRONMENTAL PREFERENCES OF STUDENTS IN AN INTRODUCTION TO SPECIAL EDUCATION COURSES

Rangasamy Ramasamy, Florida Atlantic University; Johan W. van der Jagt,
University of West Alabama; and Roy L. Jacobs, Chhanda Ghose, and
Jimmy D. Lindsey, Southern University--Baton Rouge

It was the purpose of this study to determine if a selected sample of preservice teachers had different brain hemispheric processing modes, learning styles, environmental preferences, and course-related behaviors. The population for this study was 90 students enrolled in an undergraduate introductory special education course at a doctoral level university in Florida. Forty-four of the students were selected using a systematic random sampling procedure to participate as subjects. Between- (e.g., gender, race, predominant geographic area, major, rank, and laterality) and within-subjects (e.g., PEPS Environmental Preferences) designs were used to conduct the study. Dependent variables included the subjects' Hemispheric Mode Indicator, Learning Style Inventory, and Productivity Environmental Preference Survey findings and selected responses on a four-part questionnaire. SPSS/PC+ 7.5 descriptive and inferential statistical procedures were used to analyze the data. Null hypotheses were tested at the .05 alpha level.

Results indicated that subjects had different hemisphericity modes, preferred left and right processing, and that their hemisphericity was associated with their predominant geographic area (urbanites preferred right mode processing whereas suburbanites preferred left). Subjects also had different learning styles, tended to be accommodators and convergers, but their learning styles were not associated with their gender, race, predominant geographic area, major, rank, and laterality. Subjects had different environmental preferences (e.g., noise level), and gender, race, and laterality affected these preferences. Finally, subjects indicated that they had selected course-related behaviors (e.g., notetaking).

Specific findings, limitations of the study, and recommendations for future research were presented.

PROMOTING REFUSAL SKILLS IN CHILDREN AT RISK FOR DRUG ABUSE

Patti Bokony, Nicola A. Conners, Leanne Whiteside-Mansell, and
Cynthia C. Crone, University of Arkansas for Medical Sciences

Children whose parents abuse alcohol or other drugs are considered to be at risk for substance abuse problems in adolescence and adulthood. For this reason, it is important that drug prevention programs target children whose parents abuse alcohol and/or other substances. One desired result of prevention programs for children is the ability and inclination to choose not to use drugs.

The purpose of this study was to examine the impact of an intervention designed to promote alcohol and drug refusal skills in children whose mothers were addicted to drugs. All children were enrolled with their mothers in a residential substance abuse treatment program for parenting women and their children. Twenty children completed a refusal skills questionnaire at intake into the treatment program, and at regular intervals during residential treatment and in the year following their discharge from the treatment program. Data were collected during one-on-one interviews with children by a trained researcher.

Paired *t*-tests with effect sizes were used to examine change in children's refusal skills scores before, during, and after the intervention. Because of the small sample size, scores across time were examined as individual growth curves to identify trends or potential subgroups for further analysis. Results suggested that the treatment program was successful in promoting refusal skills in the children of drug addicted mothers.

3:00 p.m.-3:50 p.m. **TESTS AND TEACHING**
Session T#038 (Training Session, 2 hours).. **Salon F**

TRAINERS: Mary H. O'Phelan and James Stone, Western Kentucky University

HOW TO GET MORE OUT OF YOUR TESTS--AND YOUR TEACHING

It is generally recognized that students do better on assessments when they have been taught the material tested! What is less recognized is that students perform well on higher order assessments when they have been taught at higher levels--and have thought at higher levels.

This session examined the relationship between how one is taught and how one is tested. Focus was on higher order thinking skills and the congruence needed between teaching and assessment. Specific strategies for raising the level of thinking through assessment were taught and tested in the training session.

The workshop included an overview of different types of assessment items, and the appropriate use of each one for the intended outcomes to be measured (so that questions correspond to the level of thinking to be elicited). Participants had opportunities to practice writing objectives, match objectives to type of assessment, create classroom assessment items appropriate to designated outcomes, and develop a table of specifications to ensure the quality of the assessment.

This two-hour session consisted of a brief presentation of assessment strategies, but the majority of time was devoted to exercises involving actual test items, conducting analyses, and employing a table of specifications. The culminating activity examined the potential impact on the participants' teaching and assessment upon return to their classrooms.

4:00 p.m.-4:50 p.m. **TEACHER EDUCATION**
Session T#039 **(Discussion Session)..Salon A**

PRESIDER: Daniel Fasko, Morehead State University

EVALUATION OF FIRST-YEAR TEACHERS' LESSON OBJECTIVES BY BLOOM'S TAXONOMY

Qaisar Sultana and Beverly M. Klecker,
Eastern Kentucky University

Nationally, one of the aims of recent school reform efforts has been to develop students' "higher order" thinking skills. Reflecting this, the first goal of the Kentucky Education Reform Act (1990) stated, "Schools must expect a high level of achievement of all students." This study described the extent to which 67 first-year teachers planned their lessons to develop students' higher cognitive skills as defined by Bloom's taxonomy.

Data for the study were the 126 objectives from the lesson plans of 67 first-year elementary and middle school teachers in a single school district, hired in 1995 through 1997. The objectives were rated by two investigators independently, using the six categories of Bloom's taxonomy. Inter-rater reliability was .98. Frequencies and percentages were calculated to describe the objectives by cognitive categories.

Analysis found that 41.3% of the objectives were at the knowledge level (lowest in Bloom's hierarchy) versus 3.2% at the evaluation level (highest level). Percentages for objectives by other categorical levels were: comprehension 19%, application 16.7%, analysis 10.3%, and synthesis 9.5%. A total of 60.3% of lesson objectives were at the knowledge and comprehension levels. A total of 77% of lesson objectives were at the lowest three levels of Bloom's hierarchy.

These results indicated that only 23% of the lesson objectives of the 67 first-year teachers in the school district were directed toward the highest three levels of Bloom's taxonomy. The primary goal of educational reform in Kentucky is to raise the standard of students' learning and performance. The attainment of this goal is dependent on or at least related to the level at which students are taught. The study has significant implications for teacher educators and school administrators..

A COMPARISON BY EDUCATION MAJORS OF INSTRUCTION IN A DEMONSTRATION CLASSROOM TO TEACHING IN THE SCHOOLS

Jerry Brooksher Gee, Nicholls State University

The literature describes the classroom as a center for a dynamic system of interactions, occurring in a multiplicity of possible combinations. While undergraduates majoring in education are primarily concerned with organizing subject matter, a conducive teaching-learning environment must first exist. Two basic types of settings have traditionally been utilized in teacher education as a transmission from classes in learning theory to practice instruction: the on-campus demonstration classroom and classrooms in the schools.

The purpose of this study was (1) to survey junior-senior level undergraduates involved in micro-teaching in two basic types of teaching settings to identify what they viewed as strengths and weaknesses, and (2) to ascertain degrees to which these strengths and weaknesses were believed to exist, and compare the findings.

During the 1998 spring semester and summer session, 74 juniors and seniors enrolled in 300-level methodology classes were requested to record strengths and weaknesses in their micro-teaching experience in a demonstration classroom and in classrooms in the schools. These strengths and weaknesses were then put into objective statements. In the 1998 fall semester and 1999 spring semester, different classes consisting of 71 juniors and seniors statistically measured degrees to which these strengths and weaknesses were believed to exist, and compared the data.

Included in the findings were perceived strengths and weaknesses which, when measured, revealed emphases not readily apparent. The factors present in both settings, demonstration and in schools, were similar; but differed significantly with regard to emphases when compared.

THE DEVELOPMENT AND IMPLEMENTATION OF AN OBSERVATIONAL SYSTEM FOR HANDS-ON DISCOVERY LEARNING IN SCIENCE

Clifford A. Hofwolt, Vanderbilt University

Practicum and student teaching supervisors have long used observational instruments to view teaching episodes to provide feedback and evaluation to practicum and student teachers. With the current emphasis on hands-on, constructivist teaching, these observation instruments have proved to be insensitive to these teaching techniques. An observational instrument developed by Evertson for the Classroom Organization and Management Program (COMP) was modified to include categories for discovery-oriented, hands-on activities and activities in which students construct meaning from their experiences.

The observational system was submitted to a panel of experts in classroom observational systems and a panel of science education experts for validation. After revision based on comments from the panels of experts, supervisors were trained to used the observational system by viewing video tapes of discovery and non-discovery oriented classroom teaching episodes of practicum and student teachers. An inter-rater reliability of 91% was achieved by these supervisors.

For two semesters, supervisors used the modified observational system with practicum students and student teachers when they were teaching science lessons. A second set of supervisors used the viewed the same lessons using an unmodified version of the observational system.

The results indicated when practicum and student teachers were teaching a science lesson that did not involve a discovery oriented or constructivist teaching strategy, no difference in the information between the unmodified and modified observational system was revealed. When a discovery or constructivist teaching strategy was used, the modified observational system was able to detect the use of the strategy. The unmodified observational system was not able to detect the use of the teaching strategy. The feedback to practicum and student teachers provided by the modified observational system has been invaluable for those striving to implement such teaching strategies.

4:00 p.m.-4:50 p.m. **PRINCIPALS AND EDUCATIONAL REFORM IN**
Session T#040 **ADMINISTRATION (Discussion Session)**........................ **Salon B**

PRESIDER: Scott C. Bauer, University of New Orleans

PRINCIPALS' LEADERSHIP STYLE, SCHOOL CLIMATE, AND PARENTAL INVOLVEMENT: THE IMPACT ON PERCEPTIONS

Cathy N. Stockton, Louisiana Tech University

A causal comparative study was used to examine identified elementary principals' leadership style, the perceived climate of schools and the perceived parental involvement at nine randomly selected school districts across four districts in Louisiana.

Principals' leadership styles were self-assessed by the Leader Behavior Analysis II, Self (Blanchard, Hambleton, Zigarmi, & Forsyth, 1991). The Leadership Behavior Analysis II, Self measured leadership style range and style adaptability. Leadership style served as the primary independent variable for this study. Type of community (rural or suburban) served as the secondary independent variable.

The Effective School Battery: Teacher Survey (Gottfredson, 1988) was used to collect data from teachers (n = 115) regarding school climate and parental involvement. The researcher selected four variables from this instrument that were applicable to this study. Three variables, Professional Development, Smooth Administration, and Morale were combined to form the school climate variable. Parent and Community Involvement was used as the parental involvement variable.

The researcher developed a questionnaire to gather data from the parents' perspective (n = 87) regarding school climate and parental involvement. It was pilot tested to establish validity and reliability.

Descriptive and inferential statistics techniques were used to analyze data. Hypotheses were tested at $p \leq .05$ using analysis of variance (ANOVA). Duncan's New Multiple Range Test was used as a post hoc comparison to examine multiple mean differences.

Findings from this study indicated suburban teachers and parents had a significantly higher mean for school climate and parental involvement than rural teachers and parents. Data showed that teachers and parents had a significantly higher perception of school climate and parental involvement at schools that had principals who were highly supportive rather than highly directive.

THE TWO-SIDED MIRROR: BRINGING A REAL WORLD LEARNING EXPERIENCE TO PRESERVICE UNDERGRADUATE STUDENTS AND GRADUATE STUDENTS IN EDUCATIONAL ADMINISTRATION

Jack Klotz and Melissa Whiting, University of Southern Mississippi

Historically, graduate students in educational leadership programs have been exposed to numerous concepts, models, theories, and skills with the assumption that upon program completion they would be able to take such learnings and apply them in appropriate job situations in a viable manner. Similarly, preservice undergraduate students in teacher education programs have garnered appropriate pedagogical and content knowledge, skills, and abilities to upon graduation begin a search, selection process associated with securing their first position within the educational arena. Yet, neither group has been afforded the opportunity to legitimately practice and assess their skills in either selecting effective, quality teachers or participating in the interview process in a risk-free environment.

The focus of this preliminary effort between two instructors, one from the Department of Educational Leadership and one from the Department of Curriculum and Instruction, has been to, in fact, provide such learning experiences for their graduate and undergraduate students, with accompanying post-reflection and analysis for student growth and development. Educational Administration students identified the traits they would desire in newly-employed teachers and then designed questions to screen candidates for teaching positions, along with possible scripted responses. Participating preservice students experienced the formal teacher interview process via a panel interview design.

Within the program's presentation, participants received information on the design, implementation, analysis and feedback to preservice participants and overall student evaluation of the learning experience from both graduate and undergraduate student participants.

A COMPARISON OF JOB RESPONSIBILITIES OF KENTUCKY'S INDUCTION-YEAR INTERN PRINCIPALS AND ASSISTANT PRINCIPALS

Zella W. Wells, Johnson County (KY) Schools

The study identified the demographics and job responsibilities (duty rankings) of first-time principals and assistant principals participating in the 1997-98 Kentucky Principal Internship Program (KPIP), a year-long induction process required for full certification. The purposes of the study were to determine: (1) the nature of their work and if their work differed, (2) the extent, if any, of school-level or gender differences in the work of assistant principal interns, and (3) if any evidence existed to suggest that the nature of assistant principals' work had changed in the past 30 years.

The study's population was all 1997-98 KPIP interns (N=154) employed in Kentucky's public schools serving traditional K-12 students. Demographic and job analysis data were obtained from 134 (87%) interns across the state. Comparisons of job duty rankings between or among various subgroups of interns were made by using either the Mann-Whitney U or the Kruskal-Wallis test, as appropriate.

Study findings included: (1) assistant principal interns did not engage in the same work as principal interns nor were duties assumed with the same degree of responsibility; (2) the work of assistant principal interns was similar across all school levels - elementary, middle, and high - as was true for principal interns; male and female assistant principal interns' work did not differ significantly except at the elementary-school level, where female interns averaged 17 more duties than did males; and (3) limited comparisons to earlier studies showed no statistically-significant changes in assistant principals' work, although possible changes in the assistant principal role were indicated when hypothetical values were used for missing data. The findings of the study suggested implications for state policy regarding the internship program and for the effect of education reform initiatives on the roles of Kentucky's principals and assistant principals.

4:00 p.m.-4:50 p.m. **HIGHER EDUCATION AND COLLEGE STUDENTS**
Session T#041 **(Discussion Session)** .... **Salon C**

PRESIDER: Vincent R. McGrath, Mississippi State University

TIME LIMITS AND RESPONSE TIME: AN EXPERIMENTAL STUDY OF PERFORMANCE IN VERBAL ANALOGIES UNDER TIME PRESSURE

Alejandro A. Lazarte, Auburn University

Computerized testing can provide large sets of response time (RT) data. However, time limits themselves are possible determinants of RT. This study examined changes in performance and RT when solving verbal analogies under no-time limit and under different deadlines. The study examined: (1) changes in the probability of abandon, right and wrong items; (2) changes in average response time for items; and (3) relations between performance with and without time-limits.

On a computer screen, 144 three-word stem analogies of different difficulties were presented to be answered with no time limits or with 3, 5 and 7 second deadlines. The deadline for answering the analogy was displayed before each analogy. The participants were 47 undergraduate students fulfilling a requirement in the Introduction to Psychology course in a large university. The average RT for right, wrong and abandoned items, and the proportion of right, wrong, and abandoned items were analyzed using a multivariate repeated Anova, where time-limit was the repeated factor.

Preliminary analysis found that proportion of wrong answers remained constant across different time limits, while the proportion of right answers declined, and the proportion of abandoned items increased. Also, the average RT for wrong answers remained larger than the average for right answers except at the most stringent deadline, where average RT for right and wrong answers were larger than for abandons. A little less than 28% of the variability of the proportion of right answers under very short deadlines can be explained by the performance under no time limits.

The RT to an item was affected drastically by deadlines and by strategical decisions whether to abandon or to respond to the item. It was suggested that the role of RT in testing would be more important as a qualitative descriptor of test-taking strategies.

DO STUDY GUIDES ALTER STUDY HABITS AND THE ACHIEVEMENT OF GRADUATE STUDENTS?

Thomas A. DeVaney, Southeastern Louisiana University

Research on the effects of adjunct displays has been conducted using a variety of subjects. However, studies involving college students have focused on undergraduate students. Furthermore, the outcomes have typically been based on tests of achievement. This study was designed to examine the effects of a one-page study guide used as a supplement to a seven-page text on a sample of graduate level students. The dependent variables included scores on a multiple choice test and the number of words highlighted in the text.

Subjects for this study were enrolled in five sections of a graduate level course during the 1999 spring and summer semesters. Each subject who completed the study during the spring semester was given a packet that contained a yellow highlighter, time allocation questionnaire, and copy of the text. Packets for the treatment group also contained a copy of the study guide. Subjects were given a 30-minute initial study period followed by a 10-minute break and 10-minute review session. Subjects then completed the time allocation questionnaire and 14-item multiple choice test taken from the test bank that accompanied the textbook. Subjects participating in the study during the summer semester followed the same procedures concerning study times and testing. However, the time between the initial study period and review period were one week.

The results from the spring semester indicated that subjects who received the study guide devoted statistically significantly more time to the study guide than the text during the review session. However, there were no significant differences in the total number of words highlighted in the text or scores on the assessment. Results for the summer semester participants were compared to the study guide group to determine the effects of the extended delay.

CLASSROOM ENVIRONMENT, TEACHING AND LEARNING EFFECTIVENESS, AND STUDENT EFFICACY FOR LEARNING IN HIGHER EDUCATION

Chad D. Ellett, John K. Rugutt, and Douglas R. Davis,
Louisiana State University

The purpose of this study was to examine the contributions of multiple dimensions of classroom learning environments and student perceptions of teaching and learning effectiveness to student efficacy for learning in higher education settings. A sample of 2190 students in 145 evening school classes at a major southern university was administered several measures during the fall 1997. Measures included the Student Assessment of Teaching and Learning (SATL), the Personal Learning Environment Measure (PLEM), and the Student Learning Efficacy Assessment (SLEA). An additional set of items requested students to assess the kinds of knowledge emphasized in courses (concrete to more abstract and procedural/applied to higher order thinking skills), and to globally evaluate their courses and to estimate their current (actual) and predicted end of course grades.

Analyses of the data included descriptive statistical summaries; extensive factor analyses of the separate measures; Alpha reliabilities for identified subscales; intercorrelations among subscales; and three, two-group discriminant function (DF) analyses. In the DF analyses, students were separated into two distinct groups (upper and lower quartiles) using the distributions for the learning efficacy, predicted course grade, and personal knowledge variables. In a fourth DF analysis, the knowledge emphasized was used as a dependent variable, and the learning efficacy measure was included with the PLEM and SATL as an independent variable set.

Results of the study showed that the SATL Quality of Teaching and Learning dimension and the PLEM Motivation/Interest/Involvement dimension were the most highly discriminating variables contributing to levels of student learning efficacy. These same variables and the student efficacy variable (SLEA) were significantly weighted in discriminating among students in the kinds of knowledge given emphasis in courses.

Major findings of the study were discussed in view of implications for the future development/revision of the measures used, broadening our understanding of student efficacy for learning, and arranging more optimally functioning learning environments in higher education settings.

4:00 p.m.-4:50 p.m. **COUNSELING**
Session T#042 **(Discussion Session)**.. **Salon D**

PRESIDER: Nola Christenberry, Arkansas State University

HIGH SCHOOL STUDENTS' PREFERENCES FOR SCHOOL COUNSELOR CHARACTERISTICS

Irvin G. Esters, The University of Southwestern Louisiana

This study examined high school students' preferences for salient school counselor characteristics. A forced choice, paired comparison format was used to elicit students' preferences among eight characteristics (similar or dissimilar attitudes and values, similar or dissimilar background and SES, similar or dissimilar race and ethnicity, and same or opposite sex). Given the increasingly pluralistic cultural landscape of American schools, sensitivity to the counselor's expressed culture and how moral visions and world views shape counseling should be taken into consideration. The study added to the extant literature by pointing out the person variables that clients, specifically school counseling clients, value. The discussion centered around the implications of the findings on the practice of school counseling in diverse populations, including cultural mistrust and ways school counselors might identify and respond to it.

THE RELATIONSHIP BETWEEN SELF-ESTEEM AND BODY IMAGE SATISFACTION AMONG AFRICAN AMERICAN FEMALE UNIVERSITY STUDENTS

Eugenie (Joan) Looby, Tammy Webb, and Dawn R. Bishop,
Mississippi State University

A negative body image is one of the precursors to the development of eating disorders. This study was designed to investigate body image, self esteem, and eating behaviors in African American female university students.

Participants included 235 African American, female, undergraduate and graduate students attending two historically black universities in the southeast. They were administered three instruments. The Multidimensional Body-Self Relations Questionnaire (MBSRQ) was used to assess affective, cognitive, and behavioral domains of the body image construct. The instrument, a 69-item self report inventory, asks individuals to respond to each item using a five-point scale ranging from definitely disagree to definitely agree. Higher scores indicate more favorable evaluations for that aspect of the body image. The Body Area Satisfaction Scale (BASS) was used to assess satisfaction with nine discrete body areas. Participants use a five-point scale to rate each body area from very dissatisfied to very satisfied, with higher scores indicating more favorable evaluations. The Rosenberg Self Esteem Inventory (RSE), a ten-item self-report questionnaire, assessed global self-esteem.

Results indicated that African American females from lower incomes were less satisfied with their bodies. Self-esteem did not affect evaluations of physical appearance but best predicted body area satisfaction and weight perceptions. Over half of the participants were not satisfied with their weight, but did not perceive it as problematic, and were not trying to lose weight or maintain a healthy lifestyle. They were, however, generally satisfied with their global appearance and looks. For African American women, body image satisfaction and attractiveness may depend on factors other than body weight. This may reduce the development of eating disorders in this population. Implications for researchers, mental health professionals and educators were suggested.

GENDER AND RACE: FACTORS IN COUNSELOR PERCEPTIONS OF THE SUPERVISORY RELATIONSHIP

Katherine Dooley, Dawn R. Bishop, and Nickeda Shelton, Mississippi State University

The study examined the influence of two variables, gender and race, on the perceptions by mental health counselors of the supervisory relationship. Research indicated that these two factors were implicated in supervisor and supervisee perceptions of supervision.

Participants included 32 master's-level counselors from two community mental health agencies and three private counseling organizations. All participants were receiving on-site supervision at their agencies as a part of their job functions. Of the 32 counselors (21 women and 11 men), 13 were African American. and 19 were Caucasian American.

Counselors were administered the Supervision Questionnaire to assess their levels of satisfaction with the supervisory relationship. The internal consistency estimates for this instrument range from .84 to .93.

An analysis of variance procedure (ANOVA) was used to analyze the data. Examination of the data analysis showed no difference in the perceptions of the supervisory relationship based on either the race or gender of the supervisors or supervisees. The authors tentatively suggested that multicultural training may have influenced counselors' perceptions.

4:00 p.m.-4:50 p.m. **EXCEPTIONAL EDUCATION AND EARLY CHILDHOOD**
Session T#043 **(Display Session)**.. **Salon E**

PARENTAL ATTITUDES TOWARD PUBLIC SCHOOL EDUCATION FOR DEAF STUDENTS AND ISSUES EFFECTING PLACEMENT CHOICES

Andrea S. Izzo, University of New Orleans

In this study, four hearing mothers with deaf children were interviewed about the process of choosing a mode of communication and school placement for their children. All of the deaf children attended local public schools. The mothers' responses were examined in order to identify any common factors that: (1) contributed to the choice of public school placement rather than residential school placement and (2) indicated level of satisfaction with placement and communication mode.

This study focused on the insights of hearing parents whose deaf children attend public schools. This population was chosen because 90% of deaf children have hearing parents, and there is a trend toward public school placement in deaf education. Furthermore, a majority of deaf students tend to graduate high school with approximately a fourth-grade reading level. These facts indicated a need for research on the situation and needs of deaf students who attend public schools and whose parents are hearing. Exploring parental viewpoints provides an important perspective on the situation.

Letters requesting interviews were sent to 30 parents whose children were receiving deaf education services. Four mothers responded. The researcher conducted one interview with each mother at a location of the mother's choice. Each interview was audio recorded and lasted approximately one hour and thirty minutes.

Results indicated a recurring theme of conflict, particularly in three major areas relevant to the deaf child: the grieving process, the cultural versus medical view of deafness, and the school system. An unexpected, though not surprising, finding pertained to the code-switching skills of the deaf children. Results further indicated that the primary factor influencing decisions about school placement was location, and the child's apparent strengths were the leading factor in choice of communication mode.

LITERACY DEVELOPMENT OF PREKINDERGARTEN CHILDREN IN SKILLS VERSUS HOLISTIC PROGRAMS

Carolyn P. Casteel and Kathleen F. Jordan, University of South Alabama,
and Bess A. Isom, University of Mobile

The purpose of this research was to determine if children in skills emphasis and holistic preschools differ in their acquisition of literacy concepts. Understanding print concepts in literacy learning is linked to later success in reading. Specifying where and how children acquire these skills is important for the design of appropriate curricula and for the development of early intervention programs.

The investigation included 141 four-year-olds (4-0 to 4-11) selected from 17 randomly chosen public/private early education centers in rural and urban areas of Alabama. Subjects were randomly selected and stratified on family income level. All were at least average in cognitive development. Eighty-three males and 58 females were included. Subjects' ethnic composition was representative of the community. Subjects were enrolled in either skills emphasis or holistic preschool programs. All subjects had been in their preschool program for the past year, and all were verified as nonreaders.

Instrumentation included a 24-item checklist for categorizing school programs and the Preschool Reading Knowledge Test (PRKT). The PRKT includes 15 subtests, measuring knowledge of function, form, and conventions of print.

Data were evaluated using regression analysis. School program, variations of age within the age group, and income level were the explanatory variables, and function, form, and conventions were the dependent variables. Results showed that children in either type of school program acquired the literacy concepts related to the function and form of print. For conventions, children in holistic programs scored significantly higher on phoneme/grapheme awareness, but those in skill emphasis programs scored higher on meta-linguistic tasks. Income level was not related to subjects' performance. It was speculated that the effects of income level are cumulative and are not yet clearly apparent for this age group. The implications of this research supported the need to investigate curriculum content and teaching strategies employed in early education programs.

MULTICULTURAL LITERATURE: DOES IT IMPACT YOUNG CHILDREN'S RACIAL ATTITUDES?

Rebecca J. McMahon, University of South Alabama

Multicultural literature is highly recommended as a means of providing children with opportunities to acquire the knowledge, attitudes, and skills required to be successful in culturally diverse settings (Derman-Sparks, 1989; Jones & Derman-Sparks, 1992; NAEYC, 1996; Williams, 1989; Winter 1994/95). The purpose of this study was to examine the effects of literature portraying African Americans on young children's attitudes toward racial diversity.

Subjects were 24 children, age three to six, enrolled in two pre-primary classes at the University of Scranton Campus School. One class served as the treatment group (n = 14), and the other served as the comparison group (n = 10). There were 15 males and 9 females. All subjects were European American.

The Preschool Racial Attitude Measure (PRAM) II, an individually administered assessment of pre-literate children's attitudes towards European American and African American persons employing a picture-story technique (Williams, Best, Boswell, Mattson, & Graves, 1975), was used as a pre- and posttest measure.

The treatment period, lasting 10 weeks, consisted of 20 bi-weekly, 20-minute sessions. During each session, children's literature selections portraying African Americans were read aloud by the researcher following the same procedure for each reading.

Results of an independent *t*-test comparing post-test PRAM II means for treatment and comparison groups indicated no significant (t (22) = -1.057, NS) difference between mean racial attitude scores for the groups. A correlated *t*-test comparing pre- and posttest PRAM II means of the treatment group indicated no significant (t (13) = 0.585, NS) difference although there was a slight decrease in posttest mean scores (pretest M = 18.36, posttest M = 17.64).

These results suggested that, although literature accurately portraying a particular racial group may be an effective catalyst for increasing children's understanding of that group's history, customs, and traditions, merely hearing multicultural literature read aloud is not enough to significantly affect children's racial attitudes.

THE USE OF REINFORCEMENT, MODELING, AND PROMPTING TO SHAPE SIGN-LANGUAGE IN AN ELEMENTARY SCHOOL STUDENT WITH DEVELOPMENTAL DELAYS

Karen I. Dittmer and T. Steuart Watson, Mississippi State University

Children with developmental delays often have communication difficulties and must be taught effective skills so that they may express their needs in class. In the present study, an eight-year-old boy diagnosed with developmental and language delays was taught functional sign language of six signs through prompting and modeling. Prior to instruction, Jerry exhibited vocalizations at inappropriate times during the day (such as during independent seat work time in class); however, he could only verbalize two actual words.

Assessment sessions consisted of the therapist giving Jerry a verbal prompt to sign a target word. If the sign was not given or was not given appropriately, the therapist would prompt Jerry by modeling the sign language word and by verbally stating the word. If Jerry still did not give the sign, the therapist would use a physical prompt by molding the child's hand into the shape of the word. Upon giving a correct response, the correct sign was reinforced with social praise and an edible reinforcer.

Baseline results ranged from 0% to 29% correct responses for all words. During sign language training, percent correct responses averaged 63% to 91%. Results indicated that there was a steady increase of appropriate sign language usage and that the procedure may be effective in teaching functional sign language to other children with developmental disabilities.

4:00 p.m.-4:50 p.m. **TESTS AND TEACHING**
Session T#044 **(Training Session continued)..Salon F**

TRAINERS: Mary H. O'Phelan and James Stone, Western Kentucky University

HOW TO GET MORE OUT OF YOUR TESTS--AND YOUR TEACHING

It is generally recognized that students do better on assessments when they have been taught the material tested! What is less recognized is that students perform well on higher order assessments when they have been taught at higher levels--and have thought at higher levels.

This session examined the relationship between how one is taught and how one is tested. Focus was on higher order thinking skills and the congruence needed between teaching and assessment. Specific strategies for raising the level of thinking through assessment will be taught and tested in the training session.

The workshop included an overview of different types of assessment items, and the appropriate use of each one for the intended outcomes to be measured (so that questions correspond to the level of thinking to be elicited). Participants had opportunities to practice writing objectives, match objectives to type of assessment, create classroom assessment items appropriate to designated outcomes, and develop a table of specifications to ensure the quality of the assessment.

This two-hour session consisted of a brief presentation of assessment strategies, but the majority of time was devoted to exercises involving actual test items, conducting analyses and employing a table of specifications. The culminating activity examined the potential impact on the participants' teaching and assessment upon return to their classrooms.

5:30 p.m. - 6:30 p.m. **Session T#045**	**MSERA BUSINESS MEETING** .... **Grand Ballroom North**
PRESIDER:	Gerald Halpin, Auburn University, President, MSERA
Welcome:	Richard C. Kunkel, Dean, College of Education, Auburn University
6:30 p.m. - 7:30 p.m. **Session T#046**	**RECEPTION SPONSORED BY THE COLLEGE OF EDUCATION, AUBURN UNIVERSITY** .... **Grand Ballroom Patio**

7:30 a.m.-9:00 a.m. **BREAKFAST FOR MSERA PRESIDENTS** .... **Card Room**

8:00 a.m.-10:00 a.m. **REGISTRATION** .... **Azalea Foyer**

9:00 a.m.-9:50 a.m. **AWARD CANDIDATE PAPER: DRUG EDUCATION, PARENT INVOLVEMENT, AND TECHNOLOGY**
Session F#001 **(Discussion Session)** .... **Salon A**

PRESIDER: Robert L. Kennedy, University of Arkansas at Little Rock

DRUG AND ALCOHOL USE IN MIDDLE AND HIGH SCHOOL: AN ANALYSIS OF COHORT GROUPS FORMED BY RACE AND SEX

Ronald D. Adams and Mark E. Pitcock, Western Kentucky University

This study utilized over one million questionnaire responses from middle and high school students archived by the Parents' Resources Institute for Drug Education, Inc. (PRIDE) for the years 1990-91 through 1997-98. The purpose was to compare drug and alcohol use over the eight-year period for cohort groups formed by the demographic variables sex and race. Percentage tables were constructed for each drug category by cohort group across the eight-year period. Analysis allowed for a comparison across years by cohort group and also analysis across cohort groups for the most current year, 1997-98.

An increase in cigarette use was noted for all high school students with white American students having the greatest percentage of use. For all ethnic groups, a greater percentage of males than females reported drinking beer while the opposite was true for wine coolers.

All cohort groups reported dramatic increases in marijuana use from 1990-91 to 1997-98. African American students had the greatest rate of increase at both the middle and high school levels with 351% for middle school males and an incredible 700% for middle school females. White American students had high rates of increases at the middle and high school levels of well over 100%. However, Hispanic American males reported the highest percentage of marijuana use at over 40%.

Cocaine use increased for all cohort groups over the eight-year period, with Hispanic American students using nearly double the other ethnic groups. There was an increase in percentage of hallucinogen use at the high school level for all cohort groups with white American and Hispanic American males having the greatest percentage of users.

Data from this study strongly suggested that drug prevention and education programs be continued and strengthened to combat the high and often increasing trend in alcohol and drug use among middle and high school age students in the United States.

EXPERT SYSTEMS AS A MINDTOOL TO FACILITATE MENTAL MODEL LEARNING

Susan Dale Mason, University of South Alabama

This exploratory study investigated the question, "Does the creation of an expert system facilitate the formation of an accurate mental model?" Thirty-three participants, who reported no knowledge of the subject domain in which the expert system was to be created, read encyclopedia extracts, viewed graphics, and then created small expert systems. The study was conducted via mainframe computer-mediated wide area network, with subjects in three countries, using a variety of communication protocols.

Three measurements were used to assess participants' mental models: (1) Pathfinder technique using PCKnot software, (2) troubleshooting test, and (3) prediction (change of state) test. These three measures were administered at the commencement of the study (pretest), after participants read the text and viewed the graphics (midtest), and after participants created expert systems (posttest).

Data were analyzed using repeated measures analysis of covariance (ANCOVA) procedures, and follow-up *t*-tests to ascertain the interval in which the greatest increase in knowledge occurred. Scores on all three measures indicated that there were small increases in scores from pretest to midtest, and substantially larger, statistically significant, increases in all scores from midtest to posttest.

In post-study surveys and interviews, participants indicated that their knowledge in the subject domain had increased, that the creation of the expert system had been very helpful in learning the material, and that they had had fun doing it. When used as a mindtool, an expert system becomes a process, not the end product. It is a means to a learning gain by engaging students, fostering their concentration, and assisting them in organizing information. Although not an investigation of distance learning, this study's results also indicated that use of this mindtool was an appropriate technique for distance education.

PARENTS' EXPERIENCE OF CULTURE WITH THEIR CHILDREN'S SCHOOLS

Nancy L. Tarsi, The University of Tennessee, Knoxville

Parent involvement in schools increases students attendance and achievement. This intervention is most important for students from marginalized groups whose academic failure rates continue to rise despite years of programmatic attempts to ameliorate the problem. Parents are difficult to recruit and maintain in involvement programs, despite cross-cultural studies that reflect strong and consistent verbal support for their children's academic success. This research proceeded from the belief that cultural mores effect parent-school relationships; some of whose traditions may be inconsistent with assumptions that are built into school-designed parent involvement programs.

Phenomenological interviews with 15 parents were conducted in a rural mountainous community in southeastern United States. Through the use of non-directive techniques, was gained an understanding of the shared experience of parent involvement for one group of parents. Three themes were identified as making up the essential structure of the experience.

The first was relational. Parents experience schools as extensions of the familial relationships that characterize the community. The world that they occupy is set in a context of historical traditions developed over generations. The second theme centered on the kinds of education that parents want for their children. Participants spoke alternately of teachers bringing all children up to the "right level," encouraging them to reach their potential, and teaching children how to live in the world. The emphasis is on the meaning of learning. The third theme revealed the centrality of the community culture to the residents of this mountain town. Traditions, common knowledge, tacit understanding, and a shared heritage join the residents in commitment to each other and to the town. The themes were outlined with portions of parent narratives from which the summary analysis emerged.

9:00 a.m.-9:50 a.m. **RESEARCH METHODS**
Session F#002 **(Discussion Session)**.. **Salon B**

PRESIDER: Linda Cornelious, Mississippi State University

FACTORS INFLUENCING PURSUIT OF HIGHER EDUCATION: EXPLORING THE FACTOR STRUCTURE OF A QUESTIONNAIRE

Sandra M. Harris and Glennelle Halpin,
Auburn University

The purpose of this study was to investigate the factor structure of the literature-based, researcher, developed Factors Influencing Participation of Higher Education (FIPHE) Questionnaire.

Participants were college students enrolled at a large, traditional land-grant university during the 1998 fall quarter. Participants were recruited through course instructors from a general studies psychology course and from several sections of an educational psychology course. Each instructor read an announcement that detailed the requirements for the study. Participants completed the questionnaires at home and returned them either to their instructors or to a place designated by the researcher.

An exploratory factor analysis was performed to determine the degree to which the data conformed to the literature-based scales established by the researcher. The Bartlett Test of Sphericity revealed that the correlation matrix was appropriate for factor analysis; therefore, the data were subjected to the factor analytic procedure. Principal axis factoring using both varimax and oblique rotations was the extraction method that was used. The varimax rotation produced the most meaningful interpretations.

Initially, 10 factors were specified as the extraction criteria. However, results from the factor analysis revealed that a nine-factor solution was as effective as a 10-factor solution in defining the data set. The nine-factor solution accounted for 37% of the common variance, whereas the 10-factor solution accounted for 38% of the variance. To achieve a degree of parsimony, the nine-factor solution was accepted. The nine-factor solution, with a few exceptions, was consistent with the hypothesized structure of the questionnaire. Results of the study provided evidence that the FIPHE Questionnaire is a potentially useful instrument that can be used to investigate the factors that influence individuals to pursue higher education.

MULTIDIMENSIONAL SCALING: RESEARCH FROM A COUNSELING PERSPECTIVE

Marilyn S. Snow and Camille B. Branton, Delta State University

Research continues to be an important aspect of counseling and the development of theory. However, there is a greater and greater emphasis on multiculturalism, diversity, and a realization that our society is constantly redefining and constructing new perspectives. The logical positivist position of an ultimate reality that is available from a scientific approach without the interaction of the researcher and research has become an inappropriate approach when considering diversity and multifaceted social realities.

In attempting to move towards a more interactive research for counseling and to also stay within the structure of quantitative analysis, multidimensional scaling (MDS) provides the quantitative approach, allowing a perceptual space for the participants and a component of interaction for the researcher. This presentation provided an overview of the multidimensional approach to research.

Multidimensional scaling is an analysis that provides the researcher with a method for understanding the perceptions of the participants of a study and allows diversity of different populations to be considered. Simply speaking, MDS measures the perceptual distances between variables and provides an overview of the spatial location of variables within several dimensions. Unlike factor analysis, which provides a view of what items on a particular instrument are related, MDS provides a view of what variables are related and unrelated. The research presented as an example of MDS came out of a study in a jail that housed a diverse population.

IMPACT OF THE NUMBER OF RESPONSE CATEGORIES ON FREQUENCY SCALES: AN EXAMINATION OF INFORMATION OBTAINED, RELIABILITY, AND FACTOR STRUCTURE

Gail H. Weems, The University of Memphis

This study examined the impact of the number of response categories to frequency scales. Specific areas addressed were inclusion or exclusion of a neutral category, scale reliability, factor structure, and information obtained.

Questionnaires were developed from the College Student Experiences Questionnaire and used with the permission of Indiana University. Questionnaires consisted of frequency items pertaining to involvement with faculty, course learning, library experiences, and experiences in writing. All questionnaires were composed of identical items; however, five different versions of the questionnaire were developed by altering the number of response categories from three up to seven. The final sample consisted of 1078 questionnaires completed by undergraduate students in developmental studies, mathematics, and history courses.

Initial results indicated a need for more response categories on the form offering only three alternatives. This was evidenced by some respondents creating additional categories of their own. Reliabilities were computed for each of the four scales and compared across the five forms. The hypothesized increase in scale reliability with an increase in the number of response categories was supported in 75% of the comparisons. The most notable increase was between forms three and seven with gains ranging from 5.18% to 7.42%.

Increased selection of the neutral category was evident in the forms with fewer response alternatives. The percentage selecting the neutral category for each item on forms three, five, and seven were 34.63%, 22.90%, and 16.98%, respectively. Examination of scale means for each form revealed insights regarding the neutral category. One might assume that respondents selecting the neutral category would be almost equally divided between the two adjoining categories if the neutral category were omitted; however, in skewed distributions data indicated a disproportionate number selecting the option toward the mode of the distribution. The differences in means were more pronounced for shorter forms than for longer.

9:00 a.m.-9:50 a.m. **EXCEPTIONAL EDUCATION**
Session F#003 **(Discussion Session)**.. **Salon C**

PRESIDER: Rebecca McMahon, University of South Alabama

THE LEAST RESTRICTIVE ENVIRONMENT: IS INCLUSION BEST FOR ALL SPECIAL NEEDS STUDENTS?

Julie A. Holmes, Louisiana Tech University/
Lincoln Parish (LA) Schools

During the 1998/99 school year, inclusion classes were implemented in five elementary schools in a north Louisiana parish in order to provide the least restrictive environment for special education students. With the inception of this program, students were placed into regular education settings by decisions made by the special education director and the principal in each building. The question was raised about how these students were selected for inclusion classes and what factors were considered in choosing an inclusion setting over a self-contained setting for students with special needs. The purpose of this paper was to identify the factors that led to the placement of some special needs students into regular classrooms. The literature on inclusion evaluation processes was reviewed, and the results of a case study and the author's personal reflections in an inclusion setting were reported. Interviews with teachers and administrators involved in the program were conducted as well to gather additional feedback.

The information collected suggested that each special needs student required individual consideration in terms of placement following a continuum of choices. Further revision of the Individuals with Disabilities Education Act (IDEA) was recommended to consider such items as costs and parental requests, and that the "stay put" provision should allow alternative arrangements for special needs students who are violent or disruptive. Flexibility was determined to be the most desirable trait imperative to the success of inclusion so that all could be served without compromising the needs of others.

TOWER OF BABEL: ISSUES IN COMPARING ACCOUNTABILITY DATA IN GENERAL AND SPECIAL EDUCATION PROGRAMS

W. Alan Coulter, Louisiana State University Health Sciences Center, and
Jane Nell Luster and John Durrett, Louisiana State Department of Education

The growing emphasis on integrated accountability systems for schools requires that data for general and special education be combined for purposes of analysis and policy development. However, while educational policies and practices are being increasingly integrated, data for tracking student services and performance are not. The purpose of this study was to examine common student performance indicators (graduation and drop-out) within general and special education databases to determine the feasibility of combined analyses and to explore issues related to integrated data.

Fundamental to any analysis of student performance is the ability to accurately describe and track the student population. States vary in their reporting methods for student data. Within states, the reporting methods in general education are consistently different from those used in special education. To compare general and special education students, a rubric for establishing a common database was first developed.

Graduation from school is an important indicator of school success and one frequently reported in the public media. Routinely, general and special education programs separately report the number of students receiving a diploma in a given school year. However, these reports are not directly comparable given both different definitions of graduation and criteria for which students are reported within a given school year.

A related issue is that of students leaving school without graduation or dropping-out. Despite agreement on a common definition of dropout, general and special education use different data definitions for this term in their separate reports.

This study began by using data from one state to identify problems in combining and comparing general and special education data. Possible solutions that could allow for increasing the comparability in reporting and analyzing graduation data were then generated. Additionally, the issue of establishing a common data definition of drop-out was addressed along with methods of analysis.

9:00 a.m.-9:50 a.m. **ADMINISTRATION**
Session F#004 (Discussion Session).. **Salon D**

PRESIDER: Cynthia Reed, Auburn University

A COMPARATIVE STUDY OF SELECTED EDUCATIONAL ADMINISTRATORS ' AND OTHER ADMINISTRATORS' COMPETENCIES NEEDED TO PERFORM THE TASKS ASSOCIATED WITH ADMINISTRATION

Abraham A. Andero, Alabama State University

The purpose of this study was to identify and compare the competencies needed to perform the tasks associated with administration. This paper described the results of a study inquiring whether the competencies needed by educational administrators (Principal and Superintendent) to perform the tasks associated with administration are different from the competencies needed by administrators (in fields other than education) to perform the same tasks.

Two methods were combined (interview and survey questionnaire) to collect data. In the survey questionnaire, both administrators were asked to rate each of the competencies as most important, very important, and important. Data were collected from a survey of selected administrators (26 educational administrators and 26 other administrators). The survey questionnaires were mailed to all selected administrators in the fall of 1998. Subjects for the interview were located in principals, superintendents and other administrators consisted several places of the selected cities within one of the southeastern states categorized as research two. The results from the interview of selected of a series of semi-structured, open-ended interview that were used to produce finely gained detail and identification of administrators' competencies that are needed to perform the tasks associated with administration.

The primary research question was stated in the null form. The .05 level of significance was used as the basis for rejection of the hypothesis. One-way ANOVA was used to test for differences between educational administrators and other administrators (who were not in school system). Frequency distributions and percentages were also used to analyze the data.

The findings of the study suggested that there was no significant difference between educational administrators and other administrators (not in school system) with respect to competencies needed to perform the tasks associated with administration.

ADMINISTRATION IN P-12 AND HIGHER EDUCATION: SIMILARITIES AND DIFFERENCES

Angela Maynard Sewall and Tom E.C. Smith,
University of Arkansas at Little Rock

The administration of educational programs has become a profession. Specific training and a wide variety of experiences are needed for individuals to serve effectively in the role of educational administration. Administering educational programs can occur at various levels, including P-12 and higher education. When individuals discuss school administration, for the most part they are referring to P-12 administration. However, in many ways, higher education administration is very similar.

Many of the job responsibilities performed by P-12 administrators are also performed by administrators of higher education programs. For example, both roles include budgeting, curriculum issues, personnel issues, and faculty governance. However, although there are some similarities between the roles of P-12 administration and higher education administration, there are also many differences. For example, while P-12 administrators have to deal with parents, this is rarely a concern in higher education. Another significant difference is in faculty governance and personnel issues. While some school systems have moved to site-based management, the degree of autonomy held by P-12 faculty members does not come close to the autonomy exercised by higher education faculty. So, while there are similarities in administering P-12 and higher education programs, there are significant differences.

This presentation explored the similarities and differences of P-12 and higher education administration. Issues examined included budget management, personnel management, curriculum management, faculty governance, faculty evaluation systems, and the definition of power and authority applied to each. Each of these areas was reviewed based on how they are handled by P-12 administrators and higher education administrators. Finally, implications for training administrators for positions in each of these systems were presented.

PUBLIC SCHOOL ADMINISTRATOR COMPETENCIES: A COMPARISON OF THE PERCEPTIONS OF STAKEHOLDERS IN ALABAMA

Mark E. Marshall and William A. Spencer, Auburn University

The purpose of this study was to assess the differences in perceptions toward competencies for public school administrators held by four groups of stakeholders in Alabama's public schools: administrators, teachers, parents, and educational leadership professors. A survey instrument that incorporated the six Interstate School Leaders Licensure Consortium (ISLLC) Standards for School Leaders and their respective indicators measured the views. Four hundred public school stakeholders were surveyed to examine their views concerning the skill areas for public school leaders. Each of the respondents had a vested interest in Alabama's public schools. Although the response patterns differed on the actual rankings of the ISLLC Standards among the four groups, three measures of correlation suggested that the rankings by the four groups were virtually the same.

The multivariate and univariate procedures utilized on the instrument, however, illustrated that differing perceptions did exist among the four groups. Alabama administrators viewed management as a more important skill than did teachers and educational leadership professors. By comparison, the parents surveyed cited ISLLC Standard four as being more of a requisite skill for school leaders than did the professors of educational leadership. Alabama teachers and parents placed more importance on current technologies that support management functions than did educational leadership professors. Similarly, on competencies related to school facilities and space, administrators, teachers, and parents in the state placed more emphasis on this skill than did the professors of educational leadership. Significant differences were also noted on skills relating to the establishment of school and community partnerships. Parents thought public school leaders' skill in this area was more important than did the professors of educational leadership.

9:00 a.m.-9:50 a.m. **PROFESSIONAL DEVELOPMENT**
Session F#005 (Training Session).. **Salon E**

TRAINER: John R. Petry, The University of Memphis

WRITING AND GETTING PUBLISHED

Training centered around opportunities and problems associated with writing and publishing articles and manuscripts. Topics included sources of ideas for research and writing, guides for effective writing, proofing and editing a manuscript, publication sources, preparing a manuscript, methods of submitting manuscripts, criteria for evaluating manuscripts, and ethics in authorship and publishing. Other topics included elements of style: elementary roles of usage, principles of composition and form, an approach to style, and faults in scholarly writing. The use of the computer in writing and editing was explored.

Objectives of the session were to increase the awareness of attendees of opportunities to publish, raise standards for writing quality manuscripts, and establish minimum guidelines for professional growth. Use of technology was of primary value, including electronic publication.

Activities included a diagnosis of the basic writing skills of attendees, analysis of articles ready for submission to publications, and administration of a predictive measure for publication success. Sources for publishing were presented and discussed. Publication sources were identified that would give the manuscript submitters a higher chance of achieving success for acceptance. Participants' manuscripts were evaluated for their content, style, impact on the reader, value to the scholarly community, and importance as a contribution to literature.

9:00 a.m.-9:50 a.m. **CURRICULUM**
Session F#006 **(Symposium)**.. **Salon F**

ORGANIZER: Frances K. Kochan, Auburn University

THEORY AS ESPOUSED AND PRACTICED: EXAMINING CONTEXT, BELIEFS, AND ACTIONS

The world of curriculum theory is seemingly haunted by recurrent questions about its relevance and relationship to practice. Practitioners often view theory as something "out there in the Ivory Tower," not related to them or to their practice. The research studies in this symposium, initiated as part of a graduate curriculum class, were undertaken in order to enhance the graduate student researchers' understandings of the interrelationships between theory and practice. The specific focus of the research was on the impact of context on theory and practice. The framework used was Habermas' cognitive interests as interpreted by Grundy and applied to teaching and learning environments. The studies used qualitative research methods to examine and analyze the teaching/learning situations.

Overview

Frances K. Kochan, Auburn University

The organizer presented an overview of the studies, the framework used, and the purposed addressed. The organizer also summarized the overall findings as they related to implications for theory and practice.

Theory and Practice: Examining Others: Examining Ourselves

Mark Rowicki, Floyd Magnet School, Montgomery (AL) City Schools

This study examined the theoretical beliefs and practice of a high school science teacher. The researcher selected the teacher because they shared common beliefs and their practice was very similar. Results indicated that, although the teacher's practice was closely aligned with his theoretical beliefs, organizational and personal constraints sometimes caused him to teach in ways they were not consistent with his beliefs. The importance of contextual factors and issues related to overcoming them were shared.

Matching Actions to Words: Espoused and Practiced Theory in Middle School

Candace Kindberg, Miscokee (GA) County Schools, Columbus

This study investigated the theoretical beliefs and practice of two middle school science teachers, a male in his second year of teaching, and a female with 28 years of experience. Both teachers were fairly consistent in applying their theory to their practice, but subtle differences were discovered in their understanding of the context in which they functioned. Issues of gender and experience were discussed.

Staying with the Tried and True: The Limiting Effect of Success on Theory and Practice

Teresa Irvin, Columbus State University

This researcher studied the theory and practice of a high school English teacher who is considered very successful. Results indicated that the teacher used a very technical, controlling approach in her teaching, for which she was rewarded by student success and school recognition. Questions of the value of varied teaching strategies, the purposes of schooling, and the role of success in hindering self-reflection and inquiry were examined.

Theory as Espoused and Practiced in a Technical College: Does Training Matter?

Dara Padgett, Nestor Consultants, Fort Benning

This study focused on the theories and practice of two electronics instructors, one with formal teacher training and the other with none. The researcher conducted instructor and student interviews, classroom, observations, and reviewed documents. Both instructors had a strong relationship between their espoused theory and their practice. The most interesting difference found was that one seemed more student-centered; the other, more subject-centered. The impact of preparation in teacher training and students' perceptions of their instructors practice, were highlighted.

10:00 a.m.-10:50 a.m. **AWARD CANDIDATE PAPERS: STATISTICS**
Session F#007 **(Discussion Session)**...**Salon A**

PRESIDER: Glennelle Halpin, Auburn University

INTERPRETING STATISTICAL SIGNIFICANCE TEST RESULTS: A PROPOSED NEW "WHAT IF" METHOD

Kevin M. Kieffer and Bruce Thompson, Texas A&M University

As the 1994 APA publication manual emphasized, *p* values are affected by sample size. Thus, it can be helpful to interpret the results of statistical significance tests in a sample size context by conducting so-called "what if" analyses. The author guidelines for the journal published by the Association for Assessment in Counseling, for example, encourage authors to report such analyses.

As originally proposed, these methods presume a fixed effect size (e.g., multiple correlation squared, ANOVA eta squared), and explore how variations in sample size for this fixed effect might change the results of statistical tests. However, these "what if" methods can be inaccurate unless "corrected" effect sizes (e.g., "adjusted" squared multiple correlation, Hays' omega squared) are employed.

This paper proposed a new method by which "what if" analyses can be conducted using estimated true population effects. These new methods were illustrated in comparison with the previous methods. Also, the new methods were applied with real examples from the published literature, and the spreadsheet commands necessary to easily implement the proposed methods were provided.

EMPIRICALLY BASED CRITERIA FOR DETERMINING MEANINGFUL EFFECT SIZE

J. Jackson Barnette, University of Iowa, and James E. McLean,
The University of Alabama at Birmingham

The concept of effect size has become very important in educational research. Some have even advocated using effect size estimates in place of tests of statistical significance. Cohen's popular book, titled *Statistical Power Analysis for the Behavioral Sciences*, recommends specific levels of effect size for "small," "medium," and "large" effects. However, even Cohen acknowledges that these values are relative to the specific content and method in a given research situation. The purpose of this study was to determine to what extent effect sizes vary by chance, how these conform to Cohen's levels, and if this variation was by chance.

Monte Carlo procedures were used to generate standardized effect sizes in a one-way ANOVA situation with 2 through 20 groups having sample sizes from 5 to 100 in steps of 5. Within each of the 180 number of group and sample size configurations, 5000 replications were done, all generated from a distribution of normal deviates. The process was tested by generating a known normal distribution and comparing it to its known characteristics.

It was found that standardized effect size variation was systematic rather than random. Number of groups and sample sizes were highly predictive of standardized effect size, but error degrees of freedom was not predictive. Equations were developed that could be used to predict standardized effect sizes that could be expected by chance, using number of groups and sample sizes as the predictor variables. The prediction equations were extremely accurate (R2= 0.9990). Thus, this research provided a better alternative for the evaluation of empirical standardized effect sizes than the somewhat arbitrary and fixed criteria often used to classify standardized effect sizes as small, medium, or large.

10:00 a.m.-10:50 a.m. **AWARD CANDIDATE PAPERS: CURRICULUM, INSTRUCTION AND**
Session F#008 **LEARNING (Discussion Session)....................................... Salon B**

PRESIDER: Diana Gardiner, Louisiana State University

NONGRADED SCHOOLS: WHY THEIR PROMISE HAS NOT BEEN REALIZED AND SHOULD BE RECONSIDERED

Roger A. Johnson and Betty H. Yarborough,
Old Dominion University

Nongraded schools make sense. The nongraded philosophy is in accord with available research on teaching and learning. It may be one of the most productive instructional paradigms for American school children at this time. When their relative effectiveness has been studied, nongraded schools have received a first-hand endorsement in terms of both student achievement and attitudes, particularly those of disadvantaged children.

In spite of favorable research and the apparent efficacy of nongraded schools, they have never become widely popular at any point in their history. One is intrigued by the comings and goings of the popularity of nongraded elementary schools. This study examined the inhibitors to implementation of nongraded schools in order to see what the hold-ups have been and to consider how to avoid them in the future.

The researchers proposed that the reasons identified are largely outside the educational process itself and relate more to external factors than to the validity of the nongradedness as a way of education. In other words, the doubts about nongradedness and/or the criticism heard most often relate to a variety of factors that affect negatively the possible implementation of nongradedness and other types of innovations as well, rather than to nongradedness as a way of schooling. Examining the reasons that appear to explain the limited inroads of nongraded education may give clues as to how this promising school structure can again be resubmitted to the public as a promising direction for American schools to pursue. It is time for nongradedness, which has waxed and waned in popularity over the last several decades, to be reconsidered pedagogically, beyond both politics and public pressure, and implemented vigorously as the way of American schooling in the new millennium.

EXPLICIT TIMING AS AN INTERVENTION TO ALTER RATE OF STUDENT ARITHMETIC PERFORMANCE DURING INDEPENDENT SEAT WORK

Katrina N. Rhymer, Christopher H. Skinner, Shantwania Jackson,
Stephanie McNeill, Tawnya Smith, and Bertha Jackson,
Mississippi State University

This study examined the effects of explicit timing with varying levels of mathematics tasks. Fifty-four students in the sixth grade completed an addition task (first-grade level), a subtraction task (3.5 grade level), and a multiplication task (sixth-grade level) during a no timing condition and a timing condition. During baseline, students were told to correctly complete as many problems as possible. Students were not informed of a time deadline; however, three minutes were allowed per mathematics task (i.e., researcher covertly timed). During intervention, students were told that they had three minutes to correctly complete as many problems as possible and that they would be timed for one minute intervals during this time limit.

A 2 (timing) by 3 (assignment) within-subjects analysis of variance was conducted. Overall, students completed more digits correct per minute and solved more problems correctly per minute during the explicit timing condition than during the no-timing condition. However, the percent of completed problems that were correct (i.e., accuracy) remained constant in both the no timing condition and the timing condition.

This study indicated that explicit timing may be effective at increasing the number of problems correct per minute and the number of problems completed per minute without decreasing accuracy for mathematics skills that are better developed. Therefore, the explicit timing procedure may be utilized in the classroom with many students who vary in academic skill levels. However, it appeared that educators should only expect increases in rates of accurate responding on skills that are more developed.

AN ANALYSIS OF CONTENT DELIVERY SYSTEMS USING SPEAKING VOICE, SPEAKING WITH REPETITION VOICE, CHANTING VOICE, AND SINGING VOICE

Karen R. Foster and Mildred E. Kersh, University of Southern Mississippi

What is the difference between kindergarten students who hear factual information about the solar system delivered in a teacher's speaking voice, a teacher's speaking voice with repetition, a teacher's chanting voice, or a teacher's singing voice on the criterion variables of solar system factual knowledge, and is this difference related to the degree of musical aptitude possessed by each student?

A random sample of 360 kindergarten students participated in a study to determine if the way their classroom teacher delivered information to them affected the amount of factual information they were able to remember about the solar system as determined by a researcher designed pre- and posttest instrument. The musical aptitude of the subjects was tested using Gordon's Primary Measure of Music Audition. Some children (the control group) heard the factual information presented in the traditional method using the teacher's normal speaking voice. A second group heard the information presented by the teacher's normal speaking voice, but the certain key phrases repeated for emphasis. A third group heard the information presented in a repeated, rhymed chanting voice by their teacher. A fourth group had the information sung to them. Subjects were tested individually on all testing instruments.

A one-way analysis of variance (ANOVA) performed on the gain scores on the Solar System Factual Knowledge Tests results of the four groups indicated that the speaking with repetition group scored lower than either chanting or singing, but significantly higher than speaking alone. Although the gain scores of the singing groups and the chanting groups were higher than either of the other two groups, they were not significantly different from each other (F=42.6; df=356; p=.000). The results of the Pearson correlation coefficient statistical procedure showed no correlation between students' musical aptitude and their gain score (correlation=0.0547, p=0.301).

10:00 a.m.-10:50 a.m. **MINORITY RECRUITMENT AND RETENTION**
Session F#009 **(Discussion Session)**.. **Salon C**

PRESIDER: Abraham A. Andero, Alabama State University

RESEARCH AND RECRUITMENT OF MALES AND MINORITIES IN NCATE TEACHER EDUCATION PROGRAMS

Beryle I. Baker, Georgia Perimeter College

The study was conducted to determine what efforts were being conducted to address the shortage of male and minority teachers in today's American classrooms.

The methods included the following: Personnel from 462 colleges and /or universities on the 1992 National Council of Accreditation of Teacher Education (NCATE) were surveyed regarding the status of recruitment of males and minorities as teacher education majors at their respective colleges and/or universities. All of the colleges and universities on the NCATE list were surveyed. This population was chosen because its accrediting body, NCATE, accredits only those schools, departments, and colleges of education that measure up to rigorous national standards.

The findings revealed that most collaborative recruitment efforts were informal. Programs between two-year colleges and senior level institutions were of a variety with different structures, purposes, and targeted populations. There were 55 programs that recruited minorities. There were only three programs that specifically recruited males.

The researcher had a complete summary of collaborative structures and a state-by-state summary of majors, males, minorities and types of programs with descriptions. This information was shared in the presentation.

This was a descriptive study, and the findings were limited to the 129 colleges and/or universities responding. There was no attempt to generalize the findings to all NCATE schools or to other teacher education colleges and universities who were not on the 1992 NCATE list.

It was recommended that a more complete and definitive study be made on this topic with an added focus on funding sources for programs designed to recruit male and minority teacher education majors.

CHARACTERISTICS OF STUDENTS WHO SUCCESSFULLY COMPLETE TWO-YEAR DEGREE PROGRAMS AT AN URBAN, HISTORICALLY BLACK, COMPREHENSIVE COMMUNITY COLLEGE

Lisa D. Hammons, Bishop State Community College,
and Jerry G. Mathews, Auburn University

The purpose of this study was to determine student graduation success or rates most and least likely from an urban, historically black, comprehensive community college. This study analyzed selected factors such as: (1) admissions status, (2) age, (3) ASSET Tests, (4) receipt of financial aid, (5) gender, (6) race, and (7) enrollment status on the influence of cumulative grade point averages. The problems examined included (1) determining whether certain demographic or academic variables predict program completion; (2) determining what differences existed, if any, between students admitted with a high school diploma or a GED towards program completion; (3) determining whether certain demographic or academic variables influence cumulative grade point averages of students enrolled at an urban, historically black, comprehensive community college; and (4) determining what differences existed, if any, between program completion rates of students who were remediated in English and math and those who were not remediated in English and math.

Sociodemographic and academic data were collected on 659 first-time, native freshmen who enrolled at Bishop State Community College in the fall quarter 1995. Transfer students were not included in this study.

Chi-square tests reported no significant difference between program completion rates and students who enrolled or did not enroll in mathematics and English remediation course work. Independent *t*-tests indicated a statistically significant difference existed in mean cumulative grade point averages for the independent variables race, age of students, and program completion. The *t*-tests for independent samples indicated no statistically significant difference existed in mean cumulative grade point averages between students who received or did not receive financial aid, admission status, nor enrollment status. The multiple regression analysis revealed that variations in the students cumulative grade point averages were explained by five influence factors which included: (1) program completion, (2) race/ethnicity, (3) assessment test math, (4) age of student, and (5) admission status.

TRANSITIONAL EXPERIENCES OF AFRICAN AMERICAN STUDENTS FROM HISTORICALLY BLACK COLLEGES AND UNIVERSITIES TO HISTORICALLY WHITE COLLEGES AND UNIVERSITIES

Joe L. Ross, Rhonda C. Porter, and Ken Sanders,
Auburn University

Many African American graduate students attending Historically White Colleges and Universities (HWCU) received their undergraduates degrees from Historically Black Colleges and Universities (HBCU). Although challenges exist for all students entering graduate school, these challenges may be magnified and altogether different for students of color, especially when transitioning from HBCU's to HWCU's. This is especially true for African American students. There is a significant amount of literature describing mentoring and other socialization programs used by colleges and universities to create an environment where students of color can more successfully complete their graduate studies.

In this study, the presenters investigated the challenges of African American students making the transition from an HBCU to an HWCU by individually reflecting and engaging in conversations about their experiences in making the transition from an HBCU to a HWCU. The presenters were the participants in this investigation. The participants were graduates of HBCU's and were doctoral students in an HWCU's College of Education in the areas of Curriculum and Teaching, Counselor Education, and School Leadership and Supervision. Each participant brought academic expertise and professionalism exhibited by her/his nomination and acceptance as Holmes Scholars at their universities.

From these reflections and conversations emerged three central themes. These themes were academic, professional, and social in nature. The academic theme was described in terms of meeting the academic rigors of graduate study. The professional theme is addressed in terms of "ways of being" in the academic environment, while the social theme addressed the terms of their relationships/interactions with peers. The presenters engaged the audience in discussions about the themes addressed in this investigation and also offered suggestions to faculties and universities to assist students making this transition. The challenges that African American graduate students have faced at HWCU's are unique, and only through the sharing of experiences can these challenges be addressed.

10:00 a.m.-10:50 a.m. **HIGHER EDUCATION**
Session F#010 **(Discussion Session)**.. **Salon D**

PRESIDER: Rodney Roth, University of Alabama

THE RELATIONSHIP BETWEEN PROFESSORS' PORTFOLIO COGNITIVE KNOWLEDGE, ATTITUDES TOWARD PORTFOLIO ASSESSMENT, AND ACTUAL USE OF PORTFOLIOS

Naomi C. Coyle, Centenary College, and Laureen Mayfield,
Louisiana Tech University/Lincoln Parish (LA) Schools

The purpose of this study was to determine the relationship between college and university professors' knowledge of portfolio assessment and their attitudes toward using portfolios as an alternative to conventional assessment practices, as well as to determine the relationship between college and university professors' attitudes toward portfolio assessment and their use of portfolios in their classrooms.

Data for this study were collected by e-mailing and conventionally mailing a questionnaire concerning portfolio assessment to all Louisiana professors involved in undergraduate teacher training courses in both public and private colleges and universities (N=300).

Analysis of the 60 responses revealed no significant relationship between the professors' knowledge of portfolio assessment and their attitudes toward using portfolios as an alternative to conventional assessment. In addition, no significant relationship was found between professors' attitudes toward portfolio assessment and their use of portfolios in their classrooms.

Based upon the results, the researcher concluded that respondents to the questionnaire might have been too homogeneous to find differences because questionnaires sometimes only tap respondents who are accessible and cooperative. The low percentage of returns (20%), which raised serious questions about the nature of the nonrespondents and sampling bias, also supported the conclusion that a more heterogeneous population was needed. A reason for the low level of response could have been the forced-choice format of the questionnaire inasmuch as several of the respondents expressed irritation that a Likert scale was not employed.

Further research should examine data from structured interviews, which permit a greater probing to obtain more complete data and allow for clarification and elaboration. Such data could be used to develop a more extensive questionnaire than that utilized in the present study.

A SURVEY OF PRESERVICE TEACHERS' EVALUATION OF THE TEAM TEACHER INTERVIEW PROCESS

Angela Lewis, Elizabeth Thrower, and Terry Roberson,
University of Montevallo

The University of Montevallo instituted a team interview process in the fall 1998 semester as additional criteria for determining eligibility to the Teacher Education Program. This study examined the perceptions of preservice teachers who underwent the team interview process. Students were surveyed to determine: (1) their understanding of the interview process, (2) their level of comfort during the interview, and (3) their level of satisfaction with the process.

The team interview process is a prerequisite for entrance into the Teacher Education Program at the University of Montevallo. Faculty and staff are divided into "interviewing teams." Students meeting a specific criteria are allowed to proceed with the interview. Evaluation of admission to the interview is monitored by the Office of Teacher Education Services.

Of the 63 students scheduled for the interview, nine canceled, one did not show for the appointment, and one student changed her major. Fifty-two students were interviewed; two failed, and 50 passed. Of the 52 students participating in the interview, 48 participated in the survey.

Qualitative and quantitative data were collected from the student survey. Students completed the survey immediately after the team interview. A Likert-type scale and open-ended questions were used on the survey.

SERVICE QUALITY IN HIGHER EDUCATION: EXPECTATIONS VERSUS EXPERIENCES OF DOCTORAL STUDENTS

James H. Lampley, East Tennessee State University

This presentation reported a study conducted to test a gap analysis model designed to measure doctoral students' perceptions of service quality in higher education at the seven doctoral granting, public universities in Tennessee: East Tennessee State University, Tennessee State University, Middle Tennessee State University; Tennessee Technological University, University of Memphis, The University of Tennessee - Knoxville, and University of Tennessee - Memphis. The study employed a 26-item survey instrument, which required doctoral students to compare their experiences with their expectations, thereby giving a measure of gaps in educational service quality at their institution. The research design included five research questions with five null hypotheses testing for relationships between students' expectations and experiences, between overall satisfaction ratings and service gaps, and between overall satisfaction and certain demographic variables.

Analysis of the data revealed a gap between students' expectations and their actual experiences with services delivered at their university. A comparison of mean expectation scores to mean experience scores revealed a significant difference between the two scores for 25 of the 26 items on the scale. Also, a significant relationship existed between the demographic variables (age, gender, ethnicity, degree area, and class load) and both the composite gap scores for each dimension and the overall satisfaction scores. In addition, a significant relationship was found between overall satisfaction and both the summed gap score for each dimension and the composite gap score for the scale.

10:00 a.m.-10:50 a.m. **DISCIPLINE**
Session F#011 (Discussion Session).. **Salon E**

PRESIDER: Gail Weems, The University of Memphis

STUDENT TEACHERS' BELIEFS ON DISCIPLINE: BEFORE AND AFTER STUDENT TEACHING

Gahan Bailey, University of South Alabama

This study assessed student teachers' beliefs on classroom discipline before and after the student teaching experience. The purpose was to investigate to what extent the participants believed in the psychological theories of Interventionism, Non-Interventionism, and Interactionalism. Furthermore, it was to determine if the student teachers' beliefs would shift after their field experience.

Participants in this study consisted of 42 elementary education majors and 25 secondary education majors (total N = 67) who were registered to student teach in the spring semester of 1999. The Beliefs on Discipline Inventory developed by Tamashiro and Glickman was administered to the participants during their pre-student teaching meeting and then again during their post-student teaching meeting.

The data analyses provided overall evidence that student teachers believed and acted according to all three approaches of discipline, yet usually one predominated in their beliefs and actions. Discussions from the findings addressed the differences between elementary and secondary student teacher discipline beliefs, shifts in the participants' beliefs, and various discipline approaches and models for teachers to deal with misbehavior.

AN EXPLORATORY CASE STUDY OF THE FORMAL AND INFORMAL DISCIPLINE POLICIES USED IN SELECTED ELEMENTARY SCHOOL CLASSROOMS

Jennifer R. Taylor-Cox, University of Maryland

The broad aim of this study was to examine classroom discipline policy through the use of a micropolitical framework. While this study explored classroom discipline policy utilizing the micropolitical perspective, it was classroom discipline that drove this research. The template that framed and guided the exploration of discipline policy through the scrutiny of specific phases of policy development included enactment, conveyance, realization, and evaluation as the particular phases of policy development.

This exploratory case study of the formal and informal discipline policies used in selected elementary school classrooms was a qualitative research endeavor that was empirically orientated. The empirical nature of this research, which included structure, validation, and attention to "traditional rules of scientific inquiry" (Yin, 1991, p. 12), was chosen to compensate for the surplus of speculative "data" in the popular classroom discipline literature. The data sources included indepth guided interviews, and semi-structured classroom observations, and were supplemented by informal interviews and pertinent printed material. The methods of data analysis involved categorizing, distilling themes, and establishing chains of evidence.

Using four phases of the policy process (enactment, conveyance, realization, and evaluation), I investigated how teachers and students vied for power, influence, control, authority; classroom conflicts unfolded; acts of negotiation affected the overall classroom discipline; protection in the classroom related to discipline; and how the classroom context affected, hindered, and constructed social order in the classroom. The views, behaviors, and verbal exchanges of the teachers and students concerning discipline were paramount to the analyses and interpretations of the discipline policies used in the selected elementary school classrooms.

Each facet of the research process was directed toward reaching a greater understanding of the formal and informal discipline policies used in selected elementary school classrooms. Conclusions and implications for researchers and practitioners included the necessity of classroom discipline policy perimeters and further scholarly attention.

FUTURE TEACHERS' PERCEPTIONS OF DISCIPLINE

Beatrice K. Volkman, Mississippi University for Women,
and Rebecca McMahon; University of South Alabama

This qualitative inquiry employed the use of questionnaires and follow-up interviews to obtain insight into the views of future teachers regarding guidance, discipline, and punishment, as well as the influences that contributed to the formation of these views. The questionnaire consisted of five demographic items and five open-ended questions. Subjects were undergraduate students (n=90) majoring in elementary education at two public universities located in the southern United States. All subjects had completed the prerequisites required for student teaching.

Following individual analysis of questionnaires by two researchers, tentative findings were collaboratively formulated. These findings served as the basis for developing three semi-structured interview questions. Follow-up interviews were conducted with 20 respondents.

When asked to distinguish the terms guidance, discipline, and punishment, 79 subjects reported that these terms were not synonymous. Eighty-two subjects positively viewed spanking as a discipline technique, and thirty-one advocated the use of time-out. When asked to prioritize the influences that impacted the development of their personal philosophy of classroom management, the majority (66%) of subjects ranked the way they were reared at home as the most compelling factor. Similarly, 53 (59%) subjects reported that information gained in university courses was the least significant factor. Thirty-three (37%) subjects felt that instruction in classroom management techniques was either completely omitted or only minimally addressed in their university program.

Results indicated that most preservice teachers could clearly define guidance in positive terms of modeling and leading. Yet, conspicuously absent from their definition was any reference to the task of the classroom teacher to foster the development of self-control and socialization skills or to create the context for positive discipline. Additionally, preservice teachers have relied more heavily on information they have gleaned through personal experience than through instruction received in their teacher education program when considering the issue of classroom management.

10:00 a.m.-10:50 a.m. **EDUCATIONAL REFORM**
Session F#012 **(Discussion Session)**.. **Salon F**

PRESIDER: Lynda Frederick, University of South Alabama

STAR REANALYSIS SHOWS IMPORTANCE OF MULTIPLE YEARS OF SMALL-CLASS INVOLVEMENT

Jeremy D. Finn, State University of New York at Buffalo,
and C. M. Achilles, Eastern Michigan University

Tennessee's Student Teacher Achievement Ratio (STAR) study was designed to answer the question: Do small classes improve student achievement . . . ? The answer was "yes." In the political move to use STAR results, the questions have changed to such topics as (paraphrased): How much do small classes improve . . .? Are improvements worth the costs? etc. One recommended policy option to conserve costs is to target small classes to at-risk students because they seem to benefit more from small classes than do other students.

Although the original STAR design and analyses amply handled the original questions, answers to the new questions require (1) a clear understanding of the STAR study, (2) new analysis processes, and (3) a thoughtful consideration of original and new findings relative to policy, practice, and new political arenas.

The present study (1) summarized the STAR experiment and (2) brought together original and later analyses of STAR data for selected grade levels. The result is an expanded understanding of the "class-size effect" first experimentally established in STAR (1985-1990), including revised effect sizes (ES) and consideration of new ideas about class size as an one-time "inoculation" or a longer-term "diet."

Examples from the reanalyses included slightly larger ESs for the benefits of small classes, improved and expanding levels of continuing student gains through the grades after adjusting for Item Response Theory (IRT) factors embedded in tests, clearer understandings of the importance of varying years of small-class treatments for young children, and more. Researchers attended also to the equity issue of differential class-size effects for groups of students.

These and other expanded findings from the detailed STAR database of over 11,000 students have resulted from continuing analyses supported by a Spencer Foundation grant, A Study of Class Size and At-Risk Students.

WHEN CHANGES DON'T MAKE CHANGES: CHALLENGES IN IMPLEMENTING REFORM IDEALS IN ELEMENTARY MATHEMATICS CLASSROOMS

JeongSuk Pang, Louisiana State University

Educational reformers are advocating changing from teacher-centered towards student-centered practices. This exploratory case study examined unevenly successful elementary mathematics teaching practices (1) to see how teachers understood and characterized reform relative to their own experiences and priorities, and (2) to articulate new issues and problems in implementing current mathematics education reform ideals.

Seventeen second-grade classrooms aspiring toward student-centered instructional methods in mathematics were observed and analyzed by the extent to which students' ideas were solicited and became the center of mathematical discussion. Two classes were finally selected because of their unequal success. Fifteen lessons were video-taped from the classrooms using two or three camcorders; one for the teacher, another for the students, and/or the third for the whole class. Additionally, audio-tapes were made of small group discussion. Additional resources were collected, such as students' papers and projects. A total of eight hours of interview was conducted with each teacher mainly focusing on how she constructed her own teaching methods.

The video-and audio-taped lessons were transcribed and analyzed using the grounded theory approach based on constant comparative methods. The classrooms were analyzed individually and comparatively. Each classroom was analyzed with regard to general social norms and sociomathematical norms that are specific to students' mathematical activity. Next, the two classrooms were compared and contrasted in terms of the two norms. Then, the underlying factors that significantly influenced the teacher's instructional goals were identified on the basis of the interviews.

Preliminary results showed similar classroom social practices but dramatically different mathematical discourse. This implied that changing only the superficial classroom social norms did not lead to reform. The difficulties and successes of the two teachers afforded the possibility of exploring the challenges of reform for teachers and other personnel who were attempting to move teaching practices towards the student-centered ideals.

LIFESKILLS EDUCATION: TWO PROGRAMS THAT WORK

Nancy L. Tarsi, The University of Tennessee, Knoxville, and
Teresa A. Garland, North Carolina State University

This presentation concerned two different educational programs. The focus of this discussion was (1) program evaluation (2) implications for educational practice.

One program was studied over a period of two years. This public school serves preschool ages through grade five. The school uses the model of Integrated Thematic Instruction (ITI) popularized by Susan Kovalik. The curriculum is designed against a backdrop of lifeskill guidelines that frame all learning: trustworthiness, active listening, no put downs, personal best, and truthfulness. Observational data were collected over this period, culminating with 10 phenomenological interviews with teachers, teacher assistants, and other school personnel. The opening question posed was, "Tell me a story that represents some aspect of your experience [teaching] here at (school)." Results revealed strong personal investment in the ITI operating system in the school, with feelings of enthusiasm and hopefulness among the personnel. The children in this school scored in the highest percentile of the Tennessee Comprehensive Assessment Program (TCAP) for the past two years. The implications pointed to a conceptual difference in how we think about teaching and learning.

The second program discussed is an after school and summer program offered through the University Extension service. Social, educational, and recreational activities for children were offered. Pre- and post-interviews were held with participants over a two-year period that asked questions pertaining to their experience of the activities and ensuing functioning levels. The most surprising result of the interviews was that children identified "getting along with [their] famil[ies]" as their biggest problem. Some pre-involvement and post-involvement academic levels were collected for participating children. The results had implications for the educator's role in facilitating emotional adjustment with students.

11:00 a.m.-11:50 a.m. **AWARD CANDIDATE PAPERS: EDUCATIONAL REFORM AND**
Session F#013 **MINORITY STUDENTS (Discussion Session)**.................... **Salon A**

PRESIDER: Neil Amos, Mississippi State University

RETHINKING LEADERSHIP ETHICS: TOWARD A NEW WORLDVIEW

Carol A. Mullen, Auburn University

This study investigated an innovative research program in a school-university setting in Florida. The Partnership Support Group (PSG) brought together a heterogeneous group of 17 teachers, administrators, professors, and students. The research problem studied was: How can co-mentoring be used as a guided form of research collaboration? Co-mentoring was used as a viable alternative to traditional mentoring wherein institutional power shapes contexts. The PSG pursued opportunities for conducting research as equal partners who proactively learn from one another.

Participants were guided to investigate their own study. The co-edited book, *New Directions for Mentoring: Creating a Culture of Synergy* , (in press) resulted. As the group leader/senior editor, the researcher addressed: (1) why the participant role needs to be rethought to promote a new leadership ethics in research, (2) how support group structures can be used to engage participants more expansively, and (3) what kinds of mentoring projects were undertaken by the PSG participants. The researcher shared how the co-mentoring writing community was developed and assessed.

Researchers are being challenged to rethink leadership ethics so that a more equitable treatment of "subject" can be produced. Researchers' work will need to incorporate: considerations of what participants can gain from contributing to research, how participants' voices are being represented in the literature, and who is credited for authorship.

The researcher shared highlights of the project that proved beneficial to the participants and to the school. Project development included: (1) framework design involving planning, group process, and assessment, (2) strategies for developing research teams (e.g., project updates), (3) documentation of group process using various methods (e.g., transcription), (4) sharing research logs to enact a forum for constructive input, (5) editorial guidance on material prepared by participants, (6) involvement of leaders outside the formal support group, and (7) project assessment by participants and disseminating results.

ENHANCING AND EVALUATING SCIENTIFIC AND MATHEMATICAL SKILLS OF AFRICAN AMERICAN STUDENTS

Jennifer M. Good, Glennelle Halpin, and Gerald Halpin,
Auburn University

Examined was growth in mathematical and scientific areas of African American college students during their first quarter of instruction. Because these students were enrolled in quantitatively-based majors, a program to enhance these particular skills was developed, which included an interactive learning laboratory with computer software in mathematics, a critical-thinking workshop designed to hone problem-solving skills in science and math, and a series of weekly tutorials. In order to serve these students most effectively, methods of instruction and evaluation were integrated throughout the program.

Data were gathered on 44 African American students who were involved in the various program components. These students visited the lab three times per week, attended workshops once a week, and engaged in tutorials with upperclass mentors once a week. Student files completed in the interactive learning laboratory and student journals completed in the critical-thinking workshops were used as a medium for instruction and a method of evaluation to capture the ongoing growth of the students. The students were pre- and posttested on three standardized subtests (critical thinking, mathematics, and science reasoning) of the Collegiate Assessment of Academic Proficiency. The first-quarter grade point averages of the students were also compared to grades of comparable samples of freshman African American students who had enrolled in quantitatively-based programs of study for five years prior to this study.

An analysis of the data revealed that student achievement in mathematical and scientific areas developed during the quarter of involvement in the academic support program.

Specifically, the first-quarter grade point averages of students involved in the program exceeded those of their peers in years prior to the program's existence. In addition, standardized mathematics and science reasoning scores increased pre- to postintervention. Comments collected in journals and files demonstrated use of problem-solving skills adopted and employed by students in real problem-solving contexts.

HERBERT M. HANDLEY AWARD FOR OUTSTANDING THESIS/DISSERTATION PROPOSAL

AFRICAN AMERICAN IDENTITY DEVELOPMENT: TOWARD THE DEVELOPMENT OF A CONTEMPORARY MODEL

Janeula M. Burt, Auburn University

The goal of this study was to provide the rationale and justification for a new conceptual framework that would enable and facilitate a better understanding of the factors that contribute to the development of a stable and healthy ethnic identity model among African Americans. Factors explored included five subscale measures: Family Socialization, Racial Consciousness, Cultural Connectedness, Collective Thought, and Self-Concept, as well as a summed score for the overall African American Identity Scale.

The statistical procedures utilized in this study were descriptive analysis, tests of reliability, multiple regression, *t* tests for independent samples, and discriminant analysis. The major findings of this study are as follows: (1) the African American Identity Scale (AAIS) was found to be a reliable measure for both the 117-item and 70-item scales and their subscales; (2) although there was a statistically significant correlation between the African American Identity Scale and the Racial Identity Attitude Scale (RIAS), interpretation of the multivariate analysis is subject to scrutiny because of the low reliability coefficients of the RIAS scores; (3) the mean AAIS score of African American students attending an historically black institution differed significantly from that of students attending a predominantly white public institution (the difference in means was in the expected direction, the AAIS mean score for students attending Howard University was higher than the mean AAIS scores for students attending Auburn University; and (4) according to a discriminant analysis, whether students attended an historically black or a predominantly white institution could be correctly classified with a statistically significantly greater probability of approximately 76%. Thus, it may be concluded that the AAIS, a new measure of African American identity, is an instrument possessing psychometric reliability and predictive utility.

11:00 a.m.-11:50 a.m. **READING AND AT-RISK STUDENTS**
Session F#014 **(Discussion Session)**.. **Salon B**

PRESIDER: Jimmy D. Lindsey, Southern University--Baton Rouge

THE VISION SCREENING OF TITLE I READING STUDENTS

Roger A. Johnson, Old Dominion University, and Rose J. Blair,
St. Pius X School (VA)

Vast numbers of American students are academically at risk. In recent years there has been much concern with state and national learning standards, block scheduling, cooperative learning, inclusion, and Title 1 reading programs. No educational innovation can be effective if a student lacks adequate visual skills. Few schools utilize a comprehensive vision screening program. Important visual skills needed for learning are not being detected. One crucial visual skill, tracking, is not assessed under the current school standards for visual screening. This visual skill is absolutely essential for reading and writing.

The New York State Optometric Association Vision Screening Battery and the Developmental Eye Movement Test were administered to 186 students in grades five through eight in order to rule out vision deficiencies as contributing to academic difficulties. The vision tests include eight separate measures of visual ability: tracking, visual acuity-near, visual acuity-far, convergence, hyperopia, stereopsis, fusion, and color vision. One half of the students were enrolled in a Title I program.

According to a chi-square statistical analysis, significantly more Title I students failed one or more of the visual screening measures than did the control students. The Title I students had a particularly difficult time with tracking, the ability to move the eyes across a sheet of paper. If one lacks the ability to move one's eyes across a line of print, one's ability to read may be significantly hindered. Many Title I students may not be aware that they have visual problems. Instead, they may simply believe that they have reading or learning problems. This misconceived self-perception, along with an undetected visual impairment, is likely to frustrate many of these students. Unless Title I students with visual impairments are properly diagnosed and treated many are unlikely to complete high school.

THE EFFECT OF DIRECT INSTRUCTION IN SIGHT WORD VOCABULARY ON READING ACHIEVEMENT OF AT-RISK STUDENTS

Julie A. Holmes and Laureen Goers Mayfield,
Louisiana Tech University/
Lincoln (LA) Parish Schools

The problem investigated in this study was to compare the achievement gains in reading vocabulary and comprehension skills in third-grade students who received whole group instruction and those who received whole group instruction with daily sight word vocabulary assignments.

The subjects were 26 third-grade students from a north Louisiana public school. The control group consisted of 15 students from a middle to low-ability class. The experimental group was 11 at-risk students, three of whom were special education inclusion students. Experimental group students were given nightly homework assignments to read lists of unmastered sight words taken from the basal reader. Data were collected for a six-week period from four story tests and a unit test accompanying the basal series. The story tests consisted of 10 multiple choice questions concerning story vocabulary, comprehension, and skills taught with the story. The unit test consisted of multiple choice questions encompassing the main skills taught throughout the six-week period: vocabulary, paraphrasing, fact and opinion, graphic aids, and reference sources. Data were analyzed by using a Mann Whitney U. Results showed a significant difference ($p<.05$) in achievement level in favor of the experimental group.

The results of the study suggested that at-risk students attained significant gains when given daily assignments to read sight word lists. The researchers also concluded that at-risk students required individualized instruction, development of sight word vocabularies, and assessment of prior knowledge in certain situations in order to succeed in reading.

11:00 a.m.-11:50 a.m. LEADERSHIP
Session F#015 (Discussion Session).. Salon C

PRESIDER: Russell West, East Tennessee State University

UNDERSTANDING TEACHER RELATIONSHIPS IN REFORMING SCHOOLS

Cathleen S. Hightower and Caroline B. Cody, University of New Orleans

The study examined three elementary school faculties involved in school reform efforts and the relationships among teachers. In schools focused on cultural change, the study sought further explanation of the relationship among principal perceptions expressed in interviews, teacher perceptions expressed in a survey, and a sociogram and whether there was congruence among the three kinds of data. The study examined (1) principal interpretations of reform efforts and their perceptions of teacher relationships within their schools, (2) teacher survey on teacher relationships within schools, and (3) sociograms of three faculties determining closest teacher-to-teacher relationships.

This study continued the work of a recent UNO dissertation that examined the way that boundaries between subgroups seemed to fade as teachers had repeated opportunities to talk together in new combinations during reform efforts. "Bridge" people played an important role in the process of reducing the boundaries between "we-group" participants in school reform talking to "they-group" resisters to school reform. This study involved three principals and three faculties (approximate total, 100). The researchers interviewed the principals following a protocol designed to give principals the opportunity to relate specific incidents and insights about their schools' recent reform efforts as well as teacher relationships in their school. The faculties of all three schools responded to a survey designed to examine teacher relationships from the perspective of Weiss' four I's (interest, information, institution, ideology) to determine if this model continued to expand the understanding of teachers' relationships in schools involved in reculturing efforts. The researcher analyzed the data produced from the sociograms and triangulated it with the information from the principal interviews and the factor analysis of the teacher surveys.

Each piece of writing was analyzed holistically and analytically. A matrix was developed to determine thematic patterns. Factor analysis was done to identify factors contributing to change and cohesion, as well as Weiss' four I's. Tentative conclusions were drawn, and attempts to verify conclusions included all three methodologies.

IMPACTS OF SHARED DECISION MAKING

Dorothy T. Riley, Trace Crossings (AL) School

This qualitative study examined the degree to which a school principal, faculty, and community achieved the goal of shared decision making. The purpose of this study was to provide them with the data needed to help formulate a plan for school improvement. Through interviews of faculty, observations of meetings, and review of the school's documentation of committee structures, the researcher determined strengths and weaknesses in the decision-making process. The participants articulated needs for improvement based on their experiences, and these were supplemented using current literature on educational leadership.

A critical case methodology was used. Several basic research questions served to direct data collection efforts. First, shared decision making was defined by the participants. Next, both formal and informal structures in place to gather teacher input were examined. The kinds of decisions that teachers want to make and those they want administrators to make were ascertained. Changes in the decision making process over time were a focus of inquiry. The study looked at how well the current decision making process is working. Finally, administration and staff responded about how decision making processes could be improved.

The researcher came to three basic conclusions. The way shared decision making was defined by all the stake holders impacts the perception of how well processes were working. There was a need to understand the levels of decision making, as well as which decisions would be shared and which ones would not. Teachers did not want to spend time meeting if they felt that their input is not going to be used.

FACULTY PARTICIPATION IN GOVERNANCE: A THREE-YEAR LONGITUDINAL STUDY

Vincent R. McGrath, Jack G. Blendinger, and Linda Cornelious, Mississippi State University

This qualitative case study reported experiences in shared governance at a college of education over a three-year period (1996-99). The initial experiences in shared governance were first presented at the 1997 annual meeting of the Mid-South Educational Research Association (MSERA). Because interest in the topic by participants attending the session was high, we continued studying the process of shared governance from within the organization and reported our findings at the 1998 annual meeting. This paper chronicled the third year of experience and constituted the only longitudinal study on the topic of shared governance in colleges of education reported in the literature.

Establishing shared governance has not been an easy task. Early exuberance has evolved into what may best be described as apathy because of benign indifference by both faculty members and administrators. High turnover of faculty has also complicated matters and retarded progress. Nevertheless, the movement steadily continues and shows promise of gaining additional momentum in the fourth year of its existence.

In addition to bylaws, shared governance, as reported in this case study, has been guided by the faculty council, a representative body comprised of professors and research scientists selected by academic departments and research units. The council emerged as the primary mechanism to implement shared governance from what was previously a rarely-activated advisory committee. Capitalizing on the need for shared responsibility in governance, council members moved rapidly to make the council a viable means for participating in the decision-making process and facilitating communication between faculty and the administration.

Data collected over a three-year period from artifacts such as operational guidelines, memoranda, minutes, reports to the dean, and faculty surveys were shared with those attending the session. Participants attending the session were invited to share their own experiences and become partners in an action research project chronicling governance experiences at colleges of education using the Internet as a communication tool.

11:00 a.m.-11:50 a.m. **LEARNING STYLES AND STUDENT MOTIVATION**
Session F#016 **(Discussion Session)**.. **Salon D**

PRESIDER: Gahan Bailey, University of South Alabama

THE CULTURE/COGNITIVE STYLE CONNECTION: A CROSS-CULTURAL ANALYSIS

Jacqueline F. Nuby and Elizabeth E. Thrower, University of Montevallo

The purpose of the study was to investigate cross-cultural differences and similarities in the cognitive styles of Caucasian, African American, Mexican American, Native American, Russian, and Spanish secondary students in grades 9-12.

The researcher administered the Myers-Briggs Type Indicator to a sample of approximately 100 students representing each cultural group. The results of the Myers-Briggs Type Indicator indicates a learner's cognitive style or approach to learning. In order to classify differences and similarities in each cultural group, SRTT tables were created. Chi-square calculations were computed, with the criterion for significance at $p < .05$.

A comparison of the cognitive styles of each cultural group revealed that, although variations existed within each cultural group, significant differences existed between groups in the approach to learning. The results were consistent with past research relating to cultural differences and its influence on cognitive style.

Based on the results of the study, the researcher discussed strategies to address differences in approach to learning based on culture.

Because knowledge of cognitive style and culture is of vital importance to teachers as we become an increasingly diverse society, a discussion followed describing various teaching strategies geared to differences in cognitive style.

EVALUATION OF AN AMERICORPS MATHEMATICS TUTORING PROGRAM

Jim R. Flaitz, The University of Southwestern Louisiana

In 1995, The University of Southwestern Louisiana was funded to establish an Americorps service learning program in the Lafayette community. In 1999, one of the components of that project was a mathematics tutoring program targeting at-risk students.

A total of 28 students was tutored, drawn from grades two through five. Program impact on academic performance was examined using two sources: a computer-based test of mathematics achievement, and the teacher-assigned six-week marks for the five marking periods of the program. The same data were gathered for the remaining students in each class who were not tutored.

T-tests revealed that gains in mathematics achievement scores for the tutored students were roughly comparable to those exhibited by the non-tutored students at most grade levels. Analysis of variance of six-weeks' marks revealed no statistically significant differences between tutored and non-tutored students at the beginning or the end of the tutoring program. There was a statistically significant interaction between tutor status and grade level based on gains in six-weeks' marks. End of semester averages were also compared, and again the tutored students were not found to be statistically significantly different from their non-tutored classmates.

The evidence gathered and the interpretation of findings must be viewed cautiously, because of limitations in the data collection design. The tentative impression generated was one of some hopefulness, as the tutored students appeared to have held their own ground, tended to show gains in academic performance similar to, or surpassing those of their non-tutored classmates, and in most instances narrowed the gap between themselves and their non-tutored classmates.

THE RELATIONSHIP BETWEEN PEER ORIENTATION AND ACHIEVEMENT IN COOPERATIVE LEARNING BASED RESEARCH METHODOLOGY COURSES

Denise DaRos, Youngstown State University, and Anthony J. Onwuegbuzie,
Valdosta State University

Research suggests that learning styles play an important role in research methodology classes. In particular, evidence exists that graduate students who tend to prefer to learn in cooperative learning groups tend to obtain lower levels of performance in research methodology courses than do their counterparts who have more individualistic orientations. Indeed, peer orientation has been found to explain as much as 27.4% of the variance in achievement among graduate students. Thus, the purpose of the present study was to determine whether the relationship between peer orientation and achievement remained in research methodology courses in which cooperative learning groups were formed to undertake the major course requirements. Indeed, scant research in the area of cooperative learning has been undertaken at the graduate level.

Participants were 159 students enrolled in seven sections of a graduate-level research methodology course at a southern university over a two-semester period. These students completed the Productivity Environmental Preference Survey. Scores from the peer-orientation subscale were correlated with the final examination. This assessment, which was administered individually in all classes, measured conceptual knowledge, including students' knowledge of research concepts, methodologies, and applications.

Findings revealed a small but statistically significant relationship between peer orientation and achievement ($r = -.16$, $p < .05$). That is, peer orientation explained 2.6% of the variance. Although this relationship was statistically lower ($p < .05$) than the corresponding relationship reported above, the fact that the relationship may still be non-trivial warrants further research. Implications of these findings were discussed.

11:00 a.m.-11:50 a.m. SCIENCE EDUCATION
Session F#017 (Discussion Session).. Salon E

PRESIDER: William Spencer, Auburn University

THE VIEWS AND BELIEFS OF A MIDDLE SCHOOL SCIENCE TEACHER REGARDING INQUIRY-BASED LEARNING WHEN USING SCIENTIFIC PROBEWARE TECHNOLOGY

David R. Wetzel, George Mason University

Both the National Science Education Standards (NSES) and the National Education Technology Standards (NETS) have emphasized the use of technology during scientific investigations of natural phenomena. This research examined how a middle school science teacher viewed the use of one type of technology, scientific probeware, and why it supports inquiry-based learning in middle school science teaching. An embedded single-case study research approach involving the middle school science teacher was conducted regarding the following questions: (1) What is the view of a middle school science teacher regarding the use of scientific probeware to support inquiry-based learning? and (2) In the view of the middle school science teacher, how does the use of scientific probeware affect student understanding of scientific concepts?

This case study examined the personal views and beliefs of the teacher regarding the use of scientific probeware in middle school science. Construct validity was accomplished using triangulation of non-participant observations, open-ended interviews, field notes, and literature related to common influences when using technology to teach science. Data were analyzed for pattern matching related to the research questions through the use of analytical or descriptive categories for explanation to maintain internal validity. A strict research protocol was maintained for external validity.

The findings of the study were that the use of scientific probeware technology does support both NSES and NETS goals for teaching science. Inquiry-based learning was evident because of a shift in the teacher's role from information giver to facilitator and becoming more student-centered, when using scientific probeware. In the view of the science teacher, students' performance and understanding of science concepts improved, as they became personally involved in their own learning. Further findings were that the use of scientific probeware appeared to assist special needs students who would remain more focused on the scientific investigations when using scientific probeware technology.

DOES RESEARCH MATTER TO THE CLASSROOM TEACHER?

Evelyn M. White and Todd Gary, Tennessee State University

Does research matter to the classroom teacher? This fundamental question should concern those of us involved in educational research. This concern led to the design and analysis of a graduate course at Tennessee State University that challenged classroom teachers to make a meaningful connection between the research literature and effective classroom teaching strategies.

This course, Advanced Science in the Elementary School (EDCI 683), is a team-taught, doctoral-level course designed for teachers trained in a NSF-funded K-6 hands-on science reform project to develop higher quality science teaching and student learning. This goal is achieved by engaging teachers in leadership roles in this project and involving them in actively learning and applying current developments in science education to this project and in their classroom.

During the fall semester 1998 twelve teachers enrolled in this course located and critiqued research articles that supported effective teaching strategies such as cooperative groups, inquiry, and the learning cycle. Then these teachers wrote papers that described how findings from these articles connected with this project and their classroom teaching. Each teacher presented her findings to the class. Also in this course, inquiry-based lesson plans were prepared, science curricular materials were evaluated, and science activities were synthesized to align with state and national guidelines. One semester after taking the course, these teachers were contacted and surveyed to determine how they applied the research findings in their classrooms and in leadership roles in the project. The teachers' work, videotapes of the presentations, and follow-up responses were analyzed to determine the extent to which they made the connection between theory and practice.

The results suggested that once teachers saw a connection between research and their classroom, the research became of value to them. School systems should provide professional development opportunities that encourage teachers to explore the value of research to their profession.

BRIDGING THE STUDENT ACHIEVEMENT GAP IN SCIENCE

Marie Miller-Whitehead, The Miller Group (AL)

The purpose of the study was to examine the relationship between school system financial and demographic data and student achievement on the science subsection of the 1998 statewide standardized test to determine if systems that served large numbers of low income students had been as successful as more affluent systems in improving student achievement.

The null hypothesis was "There is no difference in student science achievement by system per pupil expenditure, percentage of students on free and reduced lunch, and county per capita income." The Tennessee test score data has provided valuable empirical evidence for a number of longitudinal studies (Achilles, 1996; Achilles, Zaharias, & Nye, 1995; Finn & Achilles, 1990; Nye, 1992; Nye, 1993; Sanders & Rivers, 1996); the present study sought to provide additional empirical data for systems serving at-risk student populations.

The inquiry used categories from the system level data set from the Tennessee state report card consisting of the Tennessee science scale scores for grades three through eight for 1998, per pupil expenditure, per capita income, and percentage of students on free and reduced lunch. System level data, including mean, minimum and maximum scale scores by grade level, provided on the system report cards by the Tennessee Department of Finance and Accountability were used in the analysis.

A previous regression analysis conducted with the same variables on the 1996 data had yielded an R2 of .91 and an adjusted *R2* of .86. Of the variables in the analysis, percent free and reduced lunch was by far the most powerful predictor for school system science achievement in 1996 ($r = -.94, p < .001$) with per capita income of the county in which the school system was located having a positive correlation ($r = .63, p < .05$) to systemwide student performance and per pupil expenditure ($r = .46, p < .1$) also having a positive correlation to achievement.

11:00 a.m.-11:50 a.m. PERFORMANCE ASSESSMENT
Session F#018 (Symposium).. Salon F

ORGANIZER: Judith A. Burry-Stock, The University of Alabama

SYMPOSIUM ON CLASSROOM ASSESSMENT FOR THE NEXT MILLENNIUM

Overview

The topic of classroom assessment has been the focus of much attention. It has gone from being a subtopic of measurement to a topic of its own. This symposium is a set of papers on classroom assessment.

Making a Difference in Teachers' Perceived Skill Competency of Classroom Assessment

Judith A. Burry-Stock and Gyu-Pan Cho, The University of Alabama,
and Monika Schaffner, Bowling Green State University

A statewide study was done using students who had taken the required undergraduate Assessment of Classroom Learning course from The University of Alabama, and students who had graduated from other programs. The assessment course at Alabama was designed in 1990 based upon the assessment standards AFT, NEA and NCME. The purpose of the study was to see if teaching a course over a nine year period, made a difference in the way teachers perceived their assessment ability.

All 250 participants were teaching and took the Assessment Practice Inventory (Zhang and Burry-Stock, 1994). A multivariate analysis of variance indicated statistical significance in total API score and three subscales of the API. From the results of these studies it appears that a well organized assessment class, designed using the national assessment standards, does in fact produce statistically significant differences in the assessment practices of teachers.

A Regression Analysis of the Assessment Practice Inventory and Demographic and Institutional Data

Judith A. Burry-Stock and Gyu-Pan Cho, The University of Alabama,
and Monika Schaffner, Bowling Green State University

A multiple regression analysis was done from Study 1 on the API as the dependent variable with demographic variable as predictors. A backward multiple regression analysis was run using eight criterion variables: education level, grade level, primary subject, ethnicity academic institution, satisfaction with teacher preparation program, assessment preparation, and gender. The full model $R^2=.204$ and the R value is .452. The regression coefficients that are statistically significant in the full model at $\alpha=.05$ are: undergraduate academic institution and satisfaction with their assessment preparation program.

Assessment of Classroom Learning: A Course Aligned with the Assessment Standards

Gwen Hamilton, Mary Nell McNeese, and Judith A. Burry-Stock, The University of Alabama,
and Monika Schaffner, Bowling Green State University

The Alabama State Department of Education requires specific assessment objectives to be taught in teacher preparation programs. The course used in Study 1 begins with a unit of study on five achievement targets (Stiggins, 1991). Students assemble a "Unit Table of Specification."

Students do their first three projects on writing behavioral objectives, paper-pencil items, and performance measures to fit specific cells on the "Unit Table of Specifications." The remainder of the semester incorporates statistics, basic measurement theory on standard scores for interpreting standardized test score information for reading student achievement profiles at individual and classroom aggregates, and grading practices and ethical dilemmas.

Perceptions of Assessment Practices of Teachers by Students (PATS)

Monika Schaffner, Bowling Green State University, and Judith A. Burry-Stock,
Tracy Boney, Gyu-Pan Cho, and Gwen Hamilton, The University of Alabama

We know that when students are involved in assessment through student-led conferences, they will take more responsibility toward their own goals and learning (Gonderman, Hatcher, and Ikan, 1998). However, no formal research of students' perception of their teachers' assessment practices could be found so we wrote one.

A sample of teachers who participated in the 1998 statewide study (Study 1) were mailed the Perception of Assessment Practices of Teachers by Students (PATS) inventory (Schaffner, Burry-Stock, Cho, and Boney, 1999). Approximately 300 students participated in this study. The internal consistency reliability of the 4-12th grade instrument is .93 and for the K-3 instrument .73. The instruments measure students' self-reported experiences with classroom grades, such as fairness issues, curricular issues, and relevance issues.

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1995	Glennelle Halpin
1994	Diana Lancaster Gardiner
1993	Robert L. Kennedy
1992	Judith A. Boser
1991	Gypsy Abbott Clayton
1990	John R. Petry
1989	Carl R. Martray
1988	Carolyn Williams
1987	William Deaton
1986	John Thornell
1985	Carolyn Reeves-Kazelskis
1984	Robert Rasmussen
1983	Ronald Adams
1982	James E. McLean
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1980	Harry L. Bowman
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1978	Charles Babb
1977	Doug McDonald
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1975	Fred K. Bellott
1974	George Gaines
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1997	Scott C. Bauer and Ira E. Bogotch
1996	Pat Wachholz and Carol Etheridge
1995	Christopher H. Skinner, Patricia Logan, Gregg A. Johns, and Sheri L. Robinson
1994	Yi- Cheng Wu and James E. McLean
1993	Alan S. Kaufman, Jane Ford-Richardson, and James E. McLean
1992	B. A. Nye, C. M.Achilles, J. Zahorias, D. Fulton,
1991	Robert L. Kennedy, Jianliang Wang, and Gene Harryman
1990	Marion Dana, Anthony Scheffler, Mark Richmond, Sandra Smith, and Howard Draper
1989	Jeffrey Gorrell
1988	James E. McLean and Alan S. Kaufman
1987	Larry Webber, Bruce Thompson, and Gerald S. Berenson
1986	Joan M. Butler, David DeRuzzo, John P. Wollenberg, and Herbert M. Handley
1985	Charles M. Achilles and M. Nan Lintz
1984	James Flaitz
1983	James M. Prater, Jr.
1982	Debra Joyce Steele
1981	Linda Newby
1980	Ruth Bragman
1979	Charles E. Standifer and Ernest G. Maples
1978	Robert E. Bills
1977	Robert H. Bradley and Bettye M. Caldwell

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1993	Colleen C. Johnson
1992	Michele G. Jarrell
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1990	Kevin Hughes
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1987	M. Nan Lintz
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HARRY L. BOWMAN SERVICE AWARD

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1995	James E. McLean
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	Margaret Rice
	Elizabeth Wilson
1996	Denise Johnson
1995	Cindy Williams

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